BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAI'I

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate Performance-Based Regulation.	DOCKET NO. 2018-0088

HAWAIIAN ELECTRIC COMPANIES'
UPDATED REFINED PROPOSAL AND REPLY STATEMENT OF POSITION ADDRESSING PRIORITIZED PERFORMANCE MECHANISMS

EXHIBITS "A" THROUGH "I"

AND

CERTIFICATE OF SERVICE

ROD S. AOKI
ATTORNEY-AT-LAW, A LAW CORPORATION

951 Mariners Island Boulevard
Suite 300
San Mateo, CA 94404
Telephone: (808) 294-6971
Facsimile: (650) 931-2301

GOODSILL ANDERSON QUINN & STIFEL
A LIMITED LIABILITY LAW PARTNERSHIP LLP

PETER Y. KIKUTA
First Hawaiian Center, Suite 1600
999 Bishop Street
Honolulu, Hawai'i 96813
Telephone: (808) 547-5600
Facsimile: (808) 547-5880

Attorneys for
HAWAIIAN ELECTRIC COMPANY, INC.
HAWAI'I ELECTRIC LIGHT COMPANY, INC.
MAUI ELECTRIC COMPANY, LIMITED

TABLE OF CONTENTS

LIST OF EXHIBITS

Exhibit	Description
Exhibit A	LMI EE PIM – Metric 1: Energy Savings – Calculation with Illustrative Example
Exhibit B	LMI EE PIM – Metric 2: Participation – Calculation with Illustrative Example
Exhibit C	LMI EE PIM – Status Report Template
Exhibit D	Hawaiian Electric Companies' Interconnection Process
Exhibit E	Hawaiian Electric Energy Cost Recovery Factor 2009-2021
Exhibit F	Hawaiian Electric Companies' Absolute Emissions and Emissions Intensity Scorecards
Exhibit G	Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507
Exhibit H	List of Reports Recommended for Elimination or Consolidation to Streamline Reporting
Exhibit I	List of Reports Recommended to Be Continued

LIST OF COMMONLY USED ACRONYMS

- **"A&A"** Affordability & Accessibility
- "**AMI**" Advanced Metering Infrastructure
- "**D&O**" A Commission Decision and Order
- "**D&O 37507**" Decision and Order No. 37507 issued on December 23, 2020
- "**DER**" Distributed Energy Resources
- "**DR**" Demand Response
- "**EoT**" Electrification of Transportation
- **"ECR"** Energy Cost Recovery
- **"ECRC"** Energy Cost Recovery Clause
- "**EE**" Energy Efficiency
- **"EM&V"** Evaluation, Measurement & Verification
- "**EV**" Electric Vehicle
- "**GHG**" Greenhouse Gas
- "**IPP**" Independent Power Producer
- **"LCOE"** Levelized Cost of Energy
- "**LMI**" Low-to-Moderate Income
- **"MDMS"** Meter Data Management System
- "**PIMs**" Performance Incentive Mechanisms
- "**PPA**" Power Purchase Agreement
- "**RPS**" Renewable Portfolio Standards
- "**SSMs**" Shared Savings Mechanisms
- "**TOU**" Time-of-use
- "**WG**" Working Group

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAI'I

In the Matter of PUBLIC UTILITIES COMMISSION Instituting a Proceeding to Investigate Performance-Based Regulation.	DOCKET NO. 2018-0088

HAWAIIAN ELECTRIC COMPANIES'
UPDATED REFINED PROPOSAL AND REPLY STATEMENT OF POSITION
ADDRESSING PRIORITIZED PERFORMANCE MECHANISMS

In accordance with Decision and Order No. 37507,[1] the Hawaiian Electric Companies[2] respectfully submit this updated Refined Proposal and reply statement of position addressing Prioritized Performance Mechanisms for the Commission's consideration and decision making in this proceeding.[3,4,5]

[1] See Decision and Order No. 37507 which indicates that on April 9, 2021, "Parties may submit refined proposals, based on IR responses" (at 165) and, "Parties may submit reply statements of position, based on IR responses" (Appendix C at 2).

[2] Hawaiian Electric Company, Inc. ("Hawaiian Electric"), Hawai'i Electric Light Company, Inc. ("Hawai'i Electric Light"), and Maui Electric Company, Limited ("Maui Electric"), are collectively referred to as the "Hawaiian Electric Companies" or "Companies."

[3] The parties to this proceeding include the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate"), the Blue Planet Foundation ("Blue Planet"), Ulupono Initiative LLC ("Ulupono" or "UI"), the City and County of Honolulu ("City and County" or "City"), the County of Hawai'i ("COH"), Hawaii PV Coalition ("HPVC"), Hawaii Solar Energy Association ("HSEA"), and Distributed Energy Resources Council of Hawaii ("DERC") (HPVC, HSEA and DERC are collectively referred to as the "DER Intervenors"), and Life of the Land ("LOL"). The Consumer Advocate, Blue Planet, Ulupono, City and County, COH, DER Intervenors and LOL are collectively referred to as the "other Parties." The Companies and the other Parties are referred to as the "Parties."

[4] The Commission also granted participant status to Advanced Energy Economy Institute.

[5] The Companies' updated Refined Proposal Addressing Prioritized Performance Mechanisms is submitted pursuant to Decision and Order No. 37507, issued in this proceeding on December 23, 2020 ("D&O 37507").

I. INTRODUCTION

Decision and Order No. 37507 stated that the Commission would initiate and lead the initial Post-D&O Working Group to "address the following proposals the Commission prioritizes for near-term development ("Prioritized Performance Mechanisms"): Resolving final details for the Interconnection Approval PIM, LMI Energy Efficiency PIM and AMI Utilization PIM; and Finalizing a portfolio of Scorecards and Reported Metrics."[6]

D&O 37507 provided detailed direction regarding the further development of these Prioritized Performance Mechanisms. Additionally, the Commission, Commission Staff, and facilitator Rocky Mountain Institute provided further guidance regarding the development of these prioritized Performance Incentive Mechanisms ("PIMs"), Scorecards and Reported Metrics during the working group meetings held on February 9, 2021 (focused on the Interconnection Approval PIM), February 23, 2021 (focused on the LMI Energy Efficiency PIM and Scorecards), and March 9, 2021 (focused on the AMI Utilization PIM and Reported Metrics). Based upon this direction and guidance, on March 16, 2021, the Companies submitted their refined proposal for the following Prioritized Performance Mechanisms: Interconnection Approval PIM, LMI Energy Efficiency PIM, AMI Utilization PIM; Scorecards for the Interconnection Experience, Cost Control, Customer Engagement, Greenhouse Gas ("GHG") Reduction and Electrification of Transportation outcomes; and Reported Metrics for the Affordability, Customer Equity, Capital Formation, Grid Investment Efficiency, Resilience and DER Asset Effectiveness outcomes.[7]

In the March 16, 2021 filing, the Companies noted that in developing their refined proposals for the LMI Energy Efficiency PIM, the Companies were mindful of the Commission's recognition that "this PIM was introduced in the latter stages of this proceeding

[6] *Id.* at 163-164 (emphasis supplied).
[7] *Id.* at 157-160.

and that further development is desirable" and that accordingly, the Post-D&O Working Group was directed to "develop recommended baselines, thresholds for awards, and further refinements to both metrics for this PIM." Moreover, in so doing, the Commission stated that the Post-D&O Working Group "should consider a PIM design, threshold target, and reward increments that will provide flexibility in earnings opportunities and that recognize the unique challenges of Hawaii's energy landscape."[8] Similarly, for the AMI Utilization PIM, the Companies followed the Commission's direction to "focus on finalizing a PIM that accelerates the number of customers with advanced meters enabled to support time-varying rates and next generation DER programs."[9]

In developing their refined proposals for Scorecards and Reported Metrics, the Companies' noted their appreciation for the Commission's guidance that the Post-D&O Working Group "should determine how best to report on each Scorecard and Reported Metric aligned with the above guidance and consistent with the PBR guiding principle of administrative efficiency, by avoiding duplicating efforts wherever possible, and the principle of utility financial integrity, by eliminating costs related to redundant or outdated reporting."[10] Consistent with these guiding principles, and particularly given the limited amount of time that the Commission and stakeholders have to appropriately vet and fully develop these proposals for the Commission's approval by the April 30, 2021 date anticipated for the Commission's order addressing the Prioritized Performance Mechanisms, the Companies focused on those Scorecards and Reported

[8] *Id.* at 129.
[9] *Id.* at 143.
[10] *Id.* at 161 (emphasis supplied).

Metrics identified and described in D&O 37507[11] which the Commission views as "necessary to include based on experience developing PIMs during Phase 2 of this proceeding."[12]

Moreover, following on the discussion in D&O 37507 regarding streamlining of the Companies' reporting, and as discussed during the March 9, 2021 Working Group meeting, the Companies also summarized for the Commission's and stakeholders' consideration, their thoughts on streamlining the Companies' reporting and offered Exhibit D to its March 16, 2021 filing, which identified existing reporting which the Companies submit is duplicative, unnecessary, or outdated and is recommended for elimination, and reporting which could be consolidated or otherwise made more efficient. The Companies have updated and further streamlined the recommendations in Exhibit H for the Commission's consideration.

D&O 37507 also provided the parties with the opportunity to consider and submit an updated refined proposal based upon the parties' refined proposals and in response to discovery.[13] Based upon the information that has been submitted since the Companies' March 16, 2021 submission, the Companies have updated, further refined and streamlined their proposals in order to present for the Commission's consideration a comprehensive set of Prioritized Performance Mechanism proposals which is both consistent with the Commission's direction in this proceeding and which offers a reasonable, practical and implementable set of mechanisms that can be adopted by the Commission by the April 30, 2021 order deadline established in D&O 37507.

[11] *Id.* at 157-160.
[12] *Id.* at 160 (emphasis supplied).
[13] D&O 37507 at 165.

II. PERFORMANCE INCENTIVE MECHANISMS

As noted by D&O 37507, PIMs and Shared Savings Mechanisms ("SSMs") play a critical role in the PBR Framework. They represent "additional opportunities for the Companies to earn revenues and improve their financial position" and their role is "to act in a complementary fashion by balancing the cost control incentives delivered through the ARA with opportunities to earn significant financial rewards for exemplary performance."[14]

In D&O 37507, the Commission identified the following PIMs to address the Interconnection Experience, DER Asset Effectiveness, and Customer Engagement outcomes.

A. INTERCONNECTION APPROVAL

D&O 37507 noted that the Interconnection Approval PIM is intended to promote the PBR Outcome of *Interconnection Experience* by incenting the Companies to reduce the total interconnection time for systems under 100 kW, and will feature both "upside" and "downside" components.[15] D&O 37507 described the metric, targets, incentives, annual maximum award, and downside targets for this PIM. The Commission noted that while it was providing "proposed penalty thresholds" it would "allow the Post-D&O Working Group to consider this issue and propose alternative penalty thresholds for this PIM."[16] Table 8 to D&O 37507 set forth the Commission's proposed Interconnection Approval PIM Penalty thresholds.[17] In approving the Interconnection Approval PIM, the Commission made clear that it is "approving a PIM that utilizes a metric that measures days to complete steps within the Companies' control during the interconnection process."[18] The PIM defines "days within the Companies' control" as "those

[14] *Id.* at 91-92.
[15] *Id.* at 95.
[16] *Id.* at 96-97.
[17] *Id.* at 97.
[18] *Id.* at 99.

discrete steps in the interconnection process where the utility is required to take action and needs no further materials or information from the DER customer to take such action."[19]

During the February 9, 2021 Post-D&O Working Group meeting addressing this PIM, the Companies stated their position that while the Commission's proposed upside targets represented metrics that the Companies would have to expend significant effort to achieve – noting that recent historical data indicates that the Companies would have been exposed to penalties for certain periods – the Companies view the Commission's proposed downside targets and penalty thresholds as reasonably structured and accordingly did not have a recommended alternative penalty structure. No other party to the Working Group meeting proposed an alternative penalty structure.

During the February 9, 2021 Post-D&O Working Group meeting, the Parties also discussed the Interconnection Approval PIM and its purpose to improve the customers' experience by allowing them to more immediately benefit from their DER investment and facilitate more efficient integration of DERs onto the Companies' systems. In addition to the provisions of the PIM outlined in the D&O 37507, it was also clarified that the appropriate milestone for success for this PIM should be energization of a customer's system – the point at which the customer may turn on (energize) their rooftop PV system and begin to enjoy the benefits of clean renewable energy and bill savings. There was support for and no opposition to this clarification during the Working Group meeting.

It was further discussed, both during the Working Group meeting and subsequently with stakeholders that the methodology for implementation of the Interconnection Approval PIM should be that the Companies will count all applicable "steps within the Companies' control" up

[19] *Id.* at 99.

to the point of the success milestone of energization of the customer's system. As discussed in part during the Working Group meeting, "steps within the Companies' control" (without consideration for the timing of energization) can be defined as: completeness review, initial technical review, supplemental review, validation, net energy meter replacement, and execution of the customer's contract. Thus, the applicable "steps within the Companies' control" included in the calculation of the metric will depend on whether the customer has chosen to participate in the Companies' early energization pilots (or similar programs that may result from these pilots). For customers who choose to participate, the steps required to enable the contractor to energize will be counted, and any steps that are subsequent to authorized early energization will not be counted. For customers who choose not to participate in the pilots (or ongoing programs that may result from these pilots), all steps will be counted to the point of energization. Days when the Companies are waiting for the customer to respond during any of the "steps within the Companies' control" will not be counted.

Systems less than 100 kW in open and available rooftop solar programs will be tracked towards this PIM. Currently, these are: Customer Grid-Supply Plus, Smart Export, Customer Self-Supply, Net Energy Metering Plus, Standard Interconnection Agreement, and Community Based Renewable Energy. Closed programs, such as Net Energy Metering and Customer Grid-Supply, and applications submitted by mail will not be tracked for purposes of the PIM. For the first Measurement Period (calendar year 2021), applications included in the PIM will be those projects that are received and energized between January 1, 2021 and December 31, 2021. For subsequent Measurement Periods, applications included in the PIM will be those projects that are energized in those applicable calendar years. Applications that are withdrawn by customers will not be counted towards the PIM. These recommended parameters have been

developed together with the DER/Solar parties' representatives to achieve alignment for this PIM and should be incorporated into any final tariff for this PIM.

In response to CA-HECO-IR-1, in support of the foregoing discussion and proposal, the Companies provided detailed additional descriptions of both the Companies' process to count the days associated with the steps within the Companies' control with regard to: 1) completeness review; 2) initial technical review; 3) supplemental review; 4) validation; 5) net energy meter replacement; and 6) execution of contract; as well as the steps that are part of the early energization pilot under the Companies' control and the process to count the days associated with each identified step as well as a proposed methodology to verify or audit these processes.[20]

In its Refined PBR Proposals, the County of Hawaii recommended that the "Commission reconsider penalty thresholds for the Interconnection PIM."[21] Although the County of Hawaii expresses a preference for a different reward and penalty threshold than that set forth by the Commission in D&O 37507, the County of Hawaii does not provide any detailed discussion in support of its preference or reasons why its preference would provide a better total incentive to the Companies for this outcome than that identified by the Commission for this initial iteration of the PIM. As noted above, although recent historical data indicates that the Companies would have been exposed to penalties for certain periods under the proposed penalty structure in D&O 37507, the Companies view the Commission's proposed downside targets and penalty thresholds as reasonably structured for this first iteration of the PIM. The Commission's proposed structure also provides appropriate latitude for the Companies, through their continued collaboration with the solar industry, to attempt more comprehensive interconnection process improvements consistent with the Commission's goals for this outcome and PIM.

[20] *See* Companies' response to CA-HECO/IR-1 filed on April 5, 2021.
[21] County of Hawaii Refined PBR Proposals at 11.

The Consumer Advocate makes a number of general observations regarding the design of this PIM including the penalty structure set forth in D&O 37507, but ultimately concludes that absent more information to help inform whether an alternative amount may be reasonable, "the Consumer Advocate does not have any recommended specific modifications to the proposed penalty threshold …."[22] The Consumer Advocate notes that it "avoided proposing any new penalties as part of the initial deployment of the PBR Framework in the effort to make the initial adoption of a PBR Framework more appealing."[23] However, the Consumer Advocate recognizes that if penalties are to be adopted, "having penalties that are lower than the rewards still uses the "stick" but the greater potential "carrots" should make clear that the Commission supports the notion of making the initial adoption of this PIM more appealing."[24]

The Consumer Advocate also recommends that given ongoing efforts to address the interconnection of DER systems in Docket No. 2019-0323, "rather than waiting three years (as outlined on page 97 of D&O 37507), the metrics, targets, and incentives should be revisited after two years, which would allow more than a full year to collect relevant data, including the potential benefits/costs to all customers, and to evaluate whether any changes may be required." Given that the Companies are working to implement many new process improvements currently and into the future, the Companies view the Consumer Advocate's proposal to revisit this particular PIM after two years to be reasonable.

Accordingly, the Companies respectfully submit that the Interconnection Approval PIM as discussed in D&O 37507, together with the necessary implementation details discussed above, should be approved by the Commission.

---

[22] Division of Consumer Advocacy's Post D&O Statement of Position on Prioritized Performance Mechanisms ("Consumer Advocate Statement") at 6.
[23] *Id.* at 6.
[24] *Id.* at 6-7.

B. LMI/ENERGY EFFICIENCY

1. Overview

According to D&O 37507, the Low-to-Moderate Income Energy Efficiency PIM ("LMI/EE PIM") is intended to promote the PBR Outcome of *Customer Engagement*, as well as *Customer Equity* and *Affordability*, by incenting the Companies to collaborate with Hawaii Energy to deliver energy savings for LMI customers. This PIM is not intended to incent the Companies to offer their own energy efficiency programs or to compete with Hawaii Energy; rather, the PIM is intended to incent the Companies to promote Hawaii Energy programming and to optimize load and customer interactions via tools within their jurisdiction such as rate design and the provision of energy usage data. Furthermore, this PIM is intended to focus on customers identified as LMI by Hawaii Energy.[25] It will feature only an "upside" incentive and incorporate two metrics that will reward the Companies for: (1) delivering energy savings for eligible customers beyond an established baseline ("LMI/EE Metric 1"); and (2) increasing participation rates of eligible customers in Hawaii Energy programs ("LMI/EE Metric 2"). The Commission outlined the basic structure of the PIM, but instructed the Post-D&O Working Group to complete refinements to the PIM.

Specifically, D&O 37507 directed the Post-D&O Working Group "to develop recommended baselines, thresholds for awards, and further refinements to both metrics for this PIM. In so doing, it was noted that the Post-D&O Working Group should consider a PIM design, threshold target, and reward increments that will provide flexibility in earnings opportunities and that recognize the unique challenges of Hawaii's energy landscape."[26]

The Companies appreciate the intent behind this PIM -- to encourage additional

[25] *See* D&O 37507 at 124.
[26] *Id.* at 129.

collaboration between the Companies and Hawaii Energy, and also to support LMI customers. Over the last few years, the Companies have strengthened the collaborative relationship with Hawaii Energy, and this PIM should serve to further incentivize that collaborative relationship. This PIM is also timely and relevant since it is focused on helping the growing population of LMI customers, many of whom have been hit hardest by the economic downturn caused by COVID-19.

In designing the Companies' proposals for this PIM, the Companies relied on feedback and information from Hawaii Energy. Since the issuance of D&O 37507, the Companies facilitated four working sessions with Hawaii Energy to discuss design options, challenges, and opportunities for this PIM. The Companies will continue to seek input, feedback and information from Hawaii Energy as the design of this PIM progresses and throughout its implementation. Indeed, partnership with Hawaii Energy will be critical to achieving the LMI/EE PIM.

As discussed further below, in designing the Companies' proposals for this PIM, based on discussions with Hawaii Energy, the Companies' proposals are grounded on these principles:

1. While there are many options for the design of this PIM, those metrics that are simplest and quickest to calculate and understand are preferred since this is a novel PIM, having the shortest duration for vetting in the proceeding with an expected implementation date of June 1, 2021.

2. Consistent with D&O 37507, this PIM should not place undue burden on Hawaii Energy or result in duplicative Evaluation, Measurement & Verification ("EM&V") efforts.[27]

3. Consistent with the first principle above, to the greatest extent possible, the design of this PIM should align to and leverage programs, reporting, and EM&V standards and methodologies that are already in place for Hawaii Energy.

[27] *See* D&O 37507 at 137.

4. The design of this PIM should be inclusive and broad in reach to support as many customers in need as possible.

2. Companies' Proposed LMI/EE Metrics

The Companies appreciate the Commission's presentation at the Post-D&O Working Group Meeting #2 held on February 23, 2021 ("WG Meeting #2") that provided examples which clarified the intent of the metric design. The Companies reviewed these examples and weighed them in more depth in the development of LMI/EE Metrics 1 and 2. Based on analysis and further consideration, the Companies propose a modified version of one of the Commission's examples for LMI/EE Metric 1 for customer energy savings, and adopt one of the Commission's proposals for LMI/EE Metric 2 for customer participation. The Companies' proposed metrics are as follows:

LMI/EE Metric 1 (all savings are first-year savings)

- Increase in total sector savings from Affordability & Accessibility ("A&A") programs and rate design programs beyond the energy savings benchmark target that Hawaii Energy sets forth in its Commission approved annual plan.

- Awarded based on a dollar per kilo-watt hour savings ("$/kWh") factor that is applied to the energy savings (the kWh savings) that are realized beyond the energy savings benchmark target Hawaii Energy sets forth in its Commission approved annual plan which is presented on a consolidated basis.

- Sector includes eligible households in the designated Hawaii Energy zip codes and the target market for A&A programs that the Companies propose should include a wider segment of underserved customers, and customers able to self-identify as LMI customers outside of the Hawaii Energy designated LMI zip codes.

LMI/EE Metric 2

- Increase in sector participation in A&A programs and rate design programs beyond the participation benchmark target that Hawaii Energy sets forth in its Commission approved annual plan.

- Awarded based on a $/participant factor that is applied to a customer participation count realized beyond the participation benchmark targets Hawaii Energy sets forth in its Commission approved annual plan which is presented on a consolidated basis.

- Sector includes eligible households in the designated Hawaii Energy zip codes and the target market for A&A programs that the Companies propose should include a wider segment of underserved customers, and customers able to self-identify as LMI customers outside of the Hawaii Energy designated LMI zip codes.

This approach is straightforward, the least burdensome to Hawaii Energy and/or the Commission's Energy Efficiency Manager, can be quickly implemented, and does not alter the fundamental way Hawaii's energy efficiency programs are currently evaluated.

Explanation of LMI/EE Metric 1: Total Energy Savings

Alignment with Commission Example

With respect to LMI/EE Metric 1, the Companies adopted a modified version of energy savings that includes an alternative incentive structure to the one the Commission provided. The Commission provided an example described as "% increase in total sector savings as a percentage of sector sales."[28] This metric appears to compare energy saved to energy sold – or kilowatt hours ("kWh") saved to kWh sold. The Commission also indicated that an alternative to this metric "could also be translated to a % increase basis (e.g., 25% increase in savings = $250,000 reward, etc.), or to a sliding scale (e.g., every 0.2% increase = $100,000)." The Companies' proposal adopts the use of a target increase in energy savings and proposes a $/kWh award that is based on Hawaii Energy's incentive and energy savings targets that are approved by the Commission. The Companies have changed their refined proposal from a sliding scale award structure to a $/kWh approach that accounts for Hawaii Energy's incentive budgets and

[28] *See* Commission's Presentation, slide 14 for WG Meeting #2.

performance targets which are integral to this PIM. The PIM will consist of two separate $/kWh rate for residential and business energy savings.

The Companies recommend a straightforward increase in savings calculation as opposed to a percentage increase of kWh savings to kWh sold because the latter could have unintended negative performance impacts due to other State policies, Company initiatives, and performance outcomes in this proceeding, such as the promotion of Electrification of Transportation ("EOT"), which includes electric vehicle ("EV") adoption. The Companies considered ways to account for EV adoption, but concluded that in order to account for an increase in EOT in the targeted LMI population, the Companies would need to know which households have purchased EVs. However, this data is currently not publicly available. If anonymized relevant data on EV adoption were available, the Companies could consider a method to account for the energy increase, but it is still not clear what the energy savings to total consumption ratio would indicate beyond using a straightforward energy reduction.[29] Based on its current analysis, the Companies still conclude that kWh sales that result from the promotion of EV adoption for this segment could adversely impact this metric.

The second Commission example was "% reduction in load compared to an average of the previous two years' normalized load."[30] As expressed by the Companies in WG Meeting #2, the type of pre- and post- load analysis needed for this example would require significant resources to perform, is better performed on the energy efficiency programs as a total portfolio, and would fundamentally differ from the standard by which Hawaii Energy's energy efficiency programs are currently evaluated.

[29] *See* also the Companies' response to CA-HECO/IR-2, part b filed in this proceeding on April 5, 2021.
[30] *See* Commission's Presentation, slide 14 for WG Meeting #2.

LMI Customers Defined by Hawaii Energy's A&A Programs

The Companies' proposed LMI/EE Metric 1 is defined as a straightforward total energy savings in kWh, which would include energy savings for LMI customers as defined by Hawaii Energy's designated zip codes, the target market for A&A programs that may be outside those zip codes, and customers who are able to self-identify as LMI. The proposed calculation for energy savings would include the energy savings Hawaii Energy reports for its A&A Programs, the energy savings from the implementation of advanced rate design (for customers within the Hawaii Energy identified LMI zip codes as well as customers outside of these zip codes that can self-identify as LMI), and energy savings from targeted projects that the Companies collaboratively deploy with Hawaii Energy that would already be included in Hawaii Energy's A&A programs.

As discussed below, the Companies learned that Hawaii Energy does not track energy savings performance for all of its A&A Programs, and uses participation as a measure for some of the A&A Programs. The current reporting format Hawaii Energy uses for its award claim does not report performance of the A&A Programs in a single identified number, but accounts for performance in other ways. To remain consistent with Hawaii Energy's current reporting, the Companies intend to use the A&A Programs that are currently being tracked by energy savings, but will work with Hawaii Energy to expand the portfolio of A&A Programs over the duration of this PIM. For example, in the Companies' recent filing in the Community Based Renewable Energy ("CBRE") proceeding, the Companies filed a revised CBRE tariff that significantly expanded (from three to more than twenty) eligibility criteria for LMI customers.[31] Consistent

[31] *See* Community Based Renewable Energy Phase 2 Tariff and Appendices, and RRPs and Model Contracts for LMI Subscribers, Tranche 1, Molokai And Lanai, filed March 31, 2021, in Docket No. 2015-0389, Exhibit 1 at 8 ("CBRE Phase 2 Tariff Filing").

with the fourth Guiding Principle mentioned above, the Companies believe the reach for this PIM should be broad to support as many LMI customers as possible. Furthermore, Hawaii Energy has expressed that the LMI zip code methodology is a good starting point, which they have recently implemented, but are open to working with the Companies to refine the LMI definition.

At the WG Meeting #2, the Commission provided a "Summary of Statistics"[32] that showed Hawaii Energy's historical annual energy savings for its Residential- and Business-Hard-to-Reach sectors. In discussions with Hawaii Energy, this metric was intended to represent the target segments for their A&A programs. Thus, for purposes of this PIM, the Companies propose including energy savings for customers identified by Hawaii Energy, as directed in D&O 37507,[33] from all A&A Programs, including programs under the Business-Hard-to-Reach category that was included in the Commission's Summary of Statistics. This PIM will include energy savings for customers regardless of whether they have residential PV systems which is consistent with Hawaii Energy's performance assessment methodology.

Future co-deployed Hawaii Energy and Hawaiian Electric energy efficiency projects that are custom designed for an underserved customer/establishment will permit the customer/establishment to self-identify as an underserved market and will be included in the calculation for this metric. An example of such a self-identified customer is one who falls in the Asset Limited, Income Constrained, Employed ("ALICE")[34] population as defined by Aloha United Way. The Companies propose that co-deployed projects would be included as part of Hawaii Energy's A&A Programs.

---

[32] The "Summary of Statistics" table was provided in the Commission's WG Meeting #2 Presentation, slide 12.
[33] *See* D&O 37507 at 124.
[34] *See* https://www.unitedforalice.org/Hawaii.

Inclusion of Savings Due to Advanced Rate Design

Consistent with D&O 37507[35] and the Commission's proposed examples discussed in WG Meeting #2, the Companies also propose to include energy savings due to implementation of advanced rate design for customers in the designated LMI zip codes as well as anyone who participates in Hawaii Energy's A&A Programs.

With respect to measurement of energy savings due to rate design, in the Companies' Advanced Rate Design Final Proposal,[36] the Companies propose to incrementally rollout an opt-out time-of-use ("TOU") rate to designated areas where advanced meters will be deployed. As a part of this initiative, the Companies plan to conduct a TOU study that will include an analysis of bill impacts. Once the study period is complete, the Companies will also evaluate the effect of the TOU rate on customer load. The impact of the results of the study will be used to assess any resulting energy savings that would be included in LMI/EE Metric 1. The Companies' note the aggregated energy savings as reported in Hawaii Energy's approved award claims could theoretically be subtracted from the load differences calculated for TOU participation which could mitigate the conflated calculation. If the Companies are able to find similar TOU evaluations that properly account for energy efficiency and other variables, the Companies are open to assessing the applicability of such impacts into this PIM.[37]

As the Companies have done in the past, Hawaii Energy will be included in the outreach and education portion of advanced rate design deployment, which provides an opportunity for Hawaii Energy to expand its touchpoints for A&A Programs as well as its other energy efficiency programs.

---

[35] *See* D&O 37507 at 128.
[36] Docket No. 2019-0323, Hawaiian Electric's Advanced Rate Design Final Proposal, filed March 15, 2021.
[37] *See* also the Companies' response to CA-HECO/IR-2, part c.2.(a) filed in this proceeding on April 5, 2021.

Baseline for Increase in Total Energy Savings

The Companies' propose that the baselines to which the total energy savings (in kWh) is measured against is the target energy savings Hawaii Energy sets forth in its Commission approved annual plan for A&A Programs separated by residential and commercial customers. Since the Companies' proposed award is calculated by applying a $/kWh factor to realized energy savings beyond Hawaii Energy's energy savings benchmark target, it does not rely on a historical baseline. The benchmark target will be applied for the duration of the PIM for future years.

After analyzing the historical data from Hawaii Energy, there appeared to be a high variability of energy savings from year-to-year for this customer segment, which is why the Companies' refined proposal does not rely on a historical baseline. As the definition of LMI and targeted A&A Program customers evolve over time, especially in the wake of the COVID-19 pandemic, this variability is likely to continue. For these reasons and based on the timing of Hawaii Energy's triennial plan budget cycle, the sensitivity of the A&A population to economic conditions (magnified by the impacts of the COVID-19 pandemic), and the novelty of the LMI/EE PIM, the Companies' update the initially proposed baseline of a historical [3-year] rolling average to now utilize Hawaii Energy's energy savings target for A&A Programs as the baseline (i.e., benchmark target).

$/kWh Incentive Structure

The Companies' initial comments at the WG Meeting #2 supported a tiered incentive structure and a sliding scale design. After gathering additional information and considering valid points raised by the Consumer Advocate in its information requests, the Companies' refined proposal uses Hawaii Energy's incentive budget target and energy savings target from their

approved annual plan to determine a "$/kWh Factor" that will be used to calculate the Companies' award claim, which is calculated after Hawaii Energy's target energy savings in its approved annual plan is reached. The energy savings realized beyond that milestone is calculated using the $/kWh Factor. See Exhibit A for an illustrative example of how the Metric 1 performance and award would be calculated.

Explanation of Proposed LMI/EE Metric 2: Participation Count

As with the Companies' proposed LMI/EE Metric 1, the Companies' proposed LMI/EE Metric 2 is defined as a straightforward count of customer participation in A&A Programs, the Companies' advanced rate design implementation, and any co-deployed Hawaii Energy and Hawaiian Electric programs that target the A&A population. This metric is similar, if not identical, to one of the example metrics the Commission shared during the WG Meeting #2. The Companies' assumptions for this metric treat participation in different programs as separate events or counts. In other words, if the same household participates in more than one A&A Program and/or rate design, each program the household participates in counts towards this metric to better capture the depth of participation. The Companies believe that this is also aligned with how Hawaii Energy counts participation since it is by A&A program and not by customer account number.

The LMI/EE Metric 2 will similarly count participation in Hawaii Energy's Residential- and Business-Hard-to-Reach sectors, which includes programs that target customers in the designated LMI zip codes, customers outside of the LMI zip codes who participate in Hawaii Energy's A&A Programs, customers who are able to self-identify as LMI, and customers that qualify as LMI as proposed in the CBRE Phase 2 Tariff Filing.

The participation count to be used in LMI/EE Metric 2 would be the participation counts as reported in Hawaii Energy's Commission approved award claims for A&A Program participation, as well as participation in TOU, and participation in new co-deployed Hawaii Energy and Hawaiian Electric projects that will likely already be counted in Hawaii Energy's A&A Program. Through discussions with Hawaii Energy, the Companies were informed that the participation count roll-ups provided by Hawaii Energy in the worksheet it provided for the WG Meeting #2, are different count roll-ups than the participation numbers that are reported in Hawaii Energy's award claims. The Companies will need participation targets from Hawaii Energy which are not currently defined in Hawaii Energy's annual plans. In order to remain consistent with the inclusion of customers who participate in A&A Programs, the Companies propose that participation in advanced rate design include customers who also participate in Hawaii Energy's A&A Programs but may be outside of the designated LMI zip codes. Similar to LMI/EE Metric 1, the Companies' refined proposal recommends an incentive structure for LMI/EE Metric 2 that is calculated using a $/participant Factor instead of the originally proposed sliding scale method.

Based on further analysis and feedback from meetings with Hawaii Energy, the same considerations for LMI/EE Metric 1 discussed in more detail below apply to LMI/EE Metric 2, including: the timing of the Hawaii Energy triennial budget, the scope of A&A Programs based on Hawaii Energy's budget, and the evolving population of customers that fall in the designated zip codes or who are targeted for A&A Programs. Given these considerations, the Companies' refined proposal recommends the LMI/EE Metric 2 baseline be established using Hawaii Energy's target participation identified in its annual plan once approved by the Commission. See

Exhibit B for an illustrative example of how the Metric 2 performance and award would be calculated.

Other Considerations for LMI EE Metrics 1 & 2

Combined Metrics 1 & 2 Award

The Companies propose that the award for each metric not be split 50/50 and capped at $1,000,000 over three years, but rather, that the combined award of the metrics be capped at $2,000,000 over three years to provide the Companies an opportunity to achieve higher performance for one of the metrics in collaboration with Hawaii Energy.[38] Similarly, the Companies recommend that performance towards this PIM be evaluated on a consolidated basis.

Mechanism to Reduce PIM Target Proportional to Any Future Reductions in Hawaii Energy's A&A Budget

The Companies note that, as directed by D&O 37507, this PIM would begin out of synchronization, or in the middle of Hawaii Energy's triennial plan period. The degree to which Hawaii Energy's incentive budget[39] directly impacts the efforts to increase energy savings for this metric is not yet known. At WG Meeting #2 and in the Consumer Advocate's information requests, a concern was raised that Hawaii Energy's budgets should be considered when evaluating Hawaiian Electric's performance under this PIM. Accordingly, the Companies refined proposal better accounts for an increase or decrease in Hawaii Energy's budget by calculating a $/kWh Factor and $/participant Factor that is based on Hawaii Energy's incentive budget and targets in its Commission approved annual plan.

Calendar versus Program Year Measurement Period

[38] D&O 37507 at 124 indicates "Rewards for both metrics should be collectively capped at $2,000,000, calculated on a target revenue basis."
[39] The incentive budget is the amount of incentive spend Hawaii Energy has reserved for A&A Programs.

The Companies propose that the LMI/EE PIM metrics be calculated on a calendar year basis to align with other components of PBR including ARA and ESM. Both the Consumer Advocate and the Companies have proposed to include PIM incentive credits and penalties in the calculation of the ESM adjustments.[40] The Companies' proposed ARA Provision tariff states that "earnings and penalties from the Performance Incentive Mechanism Provision will be included in the determination of any applicable Earnings Sharing Adjustment." These adjustments will be based on earnings results for the twelve-month period ending December 31 of the preceding calendar year.[41] Utilizing performance in the calendar year to determine the incentives for this PIM will align the performance period for these results with the calendar year upon which Earnings Sharing Adjustments will be based, and would be consistent with the use of a calendar year performance period of other PIMs (e.g., reliability and call center PIMs).

The Companies recognize this likely places an additional interim reporting and planning requirement on Hawaii Energy, but expects that Hawaii Energy will be able to utilize its monthly reports to provide the needed information. The Companies' illustrative examples in Exhibits A and B use information already reported by Hawaii Energy on an annual basis. This proposal requires Hawaii Energy to provide at least a mid-program year report that would consider a true-up at the end of the program year if any adjustments need to be made resulting from Hawaii Energy's formal EM&V process.

3. Reporting Requirements

The Companies appreciate the Commission's list of suggested reporting requirements and find that Requirements 1-5 as identified below are feasible for reporting and will be of relevance

[40] *See Division of Consumer Advocacy's Comments on Draft Tariffs*, filed on February 26, 2021 at 23-24; *Hawaiian Electric Companies Reply to Parties' Comments Draft Tariffs*, filed on March 5, 2021, Exhibit 1, at 17-18.
[41] *See* Hawaiian Electric Companies Draft Tariffs, filed on February 16, 2021, Exhibit 2, Sheet Nos. 104A, 104F.

to the review of the LMI/EE PIM results and initial implementation. The Companies find that Requirements 6 and 7 will be informed through the metric performance itself and may not actually be required to assess the proposed LMI/EE PIM. Through the existing Hawaii Energy and Hawaiian Electric collaboration effort, the organizations developed and continue to evolve a collaboration document that provides status updates and includes some of the requirements that the Commission has identified below. At the most recent collaboration meeting facilitated by the Commission on March 31, 2021, the Commission, Hawaii Energy, and the Companies acknowledged that this status report has been beneficial to all parties. Thus, the Companies have provided an illustrative example of a report based on the existing collaboration document that could be used to report on some of the requirements listed below (see Exhibit C). Other requirements may require a standalone document to provide reporting details.

- **Requirement 1: Identifying relevant programs offered directly by the Companies to targeted customers.** The Companies will consult with Hawaii Energy to identify both residential and business Hawaii Energy programs that are categorized as an A&A Program. In addition, the Companies recognize the Commission's desire to include newly developed co-deployed projects with Hawaii Energy that are targeted to LMI customers and A&A Program targeted customers.

- **Requirement 2: Efforts taken by the Companies to promote Hawaii Energy programming to targeted customers.** Using the identified relevant programs, the Companies would be able to report on their contributions to specific Hawaii Energy A&A Programs.

- **Requirement 3: The cost of the Companies' relevant efforts, such as marketing for advanced rates, energy usage data provision efforts, and promotion of energy saving programs.** The Companies are considering more granular fiscal tracking capabilities, including for non-labor costs specifically associated with marketing materials.

- **Requirement 4: The number of eligible customers reached with relevant marketing and promotional materials, advanced rates, and data provision efforts.** The Companies would be able to provide the numbers of customers that were sent marketing and promotional materials for the relevant programs and advanced rate design outreach.

- **Requirement 5: Descriptions of data sharing efforts between the Companies and Hawaii Energy, including data provided by both entities and data requested by each entity that was not provided, including an explanation of why the data was not provided.** Through the existing collaboration framework with Hawaii Energy, which includes a provision for data sharing, Hawaiian Electric and Hawaii Energy should provide a combined report regarding data requested/provided, how the organization will use such data, and any justification if a data request is denied.

4. Response to Parties' Positions

County of Hawaii

- Supports the per household metric because it would focus more on residential customers for savings and participation: The Companies' proposal plans to expand the target of the A&A programs to include the business sector as well.

- Supports zip code methodology, but should monitor and work on a better way to reach LMI customers outside the zip codes: The Companies agree and recognize that the zip code methodology is not perfect. As an alternative approach, the Companies will start with the zip code methodology, but work with Hawaii Energy and other stakeholders to expand the definition of A&A programs over the 3-year period of this PIM to be consistent with the broad definition of LMI that the Companies proposed in the CBRE proceeding.

Consumer Advocate

- Recommends that the reward should not be assessed on LMI customers: This pertains to the overarching policy question posed in the ARD Track of the DER proceeding on whether LMI customers should be subsidized. That policy decision should be made first. The Companies would then align the PIM to the decision in ARD.

- Suggests 50% of the reward should be focused on surveys to LMI customers and to Hawaii Energy: It is unclear how surveys could be objective enough to serve as the basis for a reward under this PIM. Examples given for questions appear qualitative, and therefore would not be very conducive as a metric for PIM reward. This PIM is supposed to be effective by June 1, 2021; two months is insufficient time to develop a quality, thoroughly vetted survey that could be used for this purpose. The Companies will consider conducting surveys to obtain feedback from customers and stakeholders to improve the design and outreach of the A&A programs and collaboration with Hawaii Energy.

- Raised objections to the zip code methodology: The Companies agree and recognize that the zip code methodology is not perfect. As an alternative approach, the Companies will start with the zip code methodology, but work with

Hawaii Energy and other stakeholders to expand the definition of A&A programs over the 3-year period of this PIM to be consistent with the broad definition of LMI that the Companies proposed in the CBRE proceeding.

- Suggests the Companies continue to work with other community groups focused on LMI: The Companies agree and will continue their efforts, including facilitating the Companies' LMI Advisory Council for each service territory. The Companies hold regular meetings with the Council which consists of multiple government and non-profit organizations to discuss solutions and support for LMI customers.

C. AMI UTILIZATION

As stated in D&O 37507, the AMI Utilization PIM "is intended to promote the PBR Outcomes of Customer Engagement and DER Asset Effectiveness, as well as Grid Investment Efficiency, by incenting the Companies to accelerate utilization of AMI interval data ("AMI Utilization PIM")."[42] The Commission noted that "as the Companies continue to invest in modernizing their grid to meet evolving needs, it is critical they maximize both system and customer benefits from these significant investments. The deployment of AMI across the Companies' service territories provides a new opportunity to use granular energy consumption data to send more accurate and dynamic price signals, enable better customer understanding of energy usage, and improve program design and grid operations."[43] Given these potential use cases, the Commission stated that the PBR Framework "will include a PIM that incents the Companies to accelerate the number of customers with advanced meters enabled to support time-varying rates and next generation DER programs to set a foundation for future utility applications."[44]

The Commission further opined that "this PIM will expand on the endeavors initiated by the Companies in Docket No. 2018-0141, in which the Companies are in the process of

[42] D&O 37507 at 137.
[43] D&O 37507 at 137-138.
[44] D&O 37507 at 138.

deploying approximately 68,300 advanced meters on an opt-out basis in targeted areas beginning in 2021, with plans to ultimately install approximately 175,000 meters by 2023.[45] This PIM also will support the discussions on advanced rate design taking place in Docket No. 2019-0323, focusing on developing new DER policies for the Companies." The Commission directed the Post-D&O Working Group to "focus on finalizing a PIM that accelerates the number of customers with advanced meters enabled to support time-varying rates and next generation DER programs."[46] To help facilitate this discussion, the Commission provided the following guidance:[47]

- Metric: The Commission is inclined to use the percent of each Company's total customers with advanced meters enabled to support time-varying rates and next generation DER programs. The Post-D&O Working Group should consider what internal structures and processes must be in place, beyond simply meter deployment, to enable customers to benefit from AMI investments, and how these improvements can be incorporated into the PIM.

- Targets: Targets should consider the Companies' forecasted advanced meter deployment for their Phase 1 Grid Modernization Strategy.

During the March 9, 2021 Post-D&O Working Group Third Meeting ("WG Meeting #3") addressing this PIM, the Commission introduced two potential PIM designs:

Metric No. 1: % of customers with advanced meters delivering at least two of the following benefits: 1) Bills that are determined with AMI interval data; 2) AMI interval data collection and accessibility via customer portals; or 3) Enrollment and participation in DER, DR, TOU, or other advanced programs.

Metric No. 2: % of customers offered advanced meters by the Companies but who choose to opt-out.

---

[45] D&O 37507 at 141.
[46] D&O 37507 at 143.
[47] D&O 37507 at 143-144.

During the WG Meeting #3, the Parties sought clarification on both potential PIM designs. Under Metric No. 1, it was clarified that customers with advanced meters should be billed based on interval data and not simply a single monthly register read to the Meter Data Management System ("MDMS") and SAP. This is intended to avoid the need to retroactively reprogram meters to be capable of transmitting interval data and accelerate readying AMI infrastructure to support TOU and other rate programs. The Commission also clarified that the PIM design was not intended to measure actual enrollment in DER, DR, TOU, or other advanced programs, but rather to *enable* enrollment and participation in such programs.

While discussing Metric No. 2 during the WG Meeting #3, numerous parties recognized that customers' decisions to opt-out will often be outside of the Companies' control. For many customers (e.g., those with radio frequency ("RF") and surveillance concerns), no level of customer engagement will prevent them from opting out. The Commission acknowledged this could be true; however, the Commission clarified the intent of this PIM is to incentivize the Companies' customer engagement activities to minimize the number of customers who opt-out.

At the WG Meeting #3, the Companies provided a status update on its Grid Modernization Phase 1 investments. Most importantly, the Companies described how the MDMS, Energy Portal, and telecommunications network will all be implemented before accelerating advanced meter deployments under the Companies' recently approved plan to switch from an opt-in approach to an opt-out approach.[48] Customers will be able to see information such as their interval usage down to 15-minute increments, self-generation output, utilize historical usage information to compare rate plans, download Green Button data, and benefit from other advanced features. The Energy Portal is already available on a hosted

[48] *See* Decision and Order No. 37655 *Approving Hawaiian Electric's Opt-Out Approach* issued on March 3, 2021, in Docket No. 2018-0141.

environment to existing advanced metering customers and will even be available to non-advanced metering customers following their monthly manual meter read. However, some of the functionality described above will not be available without interval data.

The Companies agree with the Commission that this PIM should focus beyond simply meter deployment and view the Commission's proposed Metric No. 1, as clarified during the WG Meeting #3, to be reasonably structured and, accordingly, do not have a recommended alternative upside structure. Table 1 below shows the Companies' proposed targets for this PIM, which are consistent with the proposed target percentages in D&O 37507.[49] These targets are significantly more ambitious than the already aggressive Proportional Opt-Out Deployment and Phase 1 Deployment plans of 175,170 meters by 2023.

Table 1: AMI Utilization PIM Targets and Incentives

* Targets defined as cumulative % of customers with advanced meters delivering at least two of the following benefits: 1) Bills that are determined with AMI interval data; 2) AMI interval data collection and accessibility via customer portals; or 3) Enabling enrollment and participation in DER, DR, TOU, or other advanced programs.

Targets and Potential Rewards	2021	2022	2023
$1,400,000 Hawaiian Electric $300,000 Hawai'i Electric Light/Maui Electric	10%	25%	45%

Based on the percentages in Table 1 above, and the customer count as of December 31, 2019,[50] the Company-specific targets of cumulative customers with advanced meters delivering at least two of the following benefits: 1) bills that are determined with AMI interval data[51]; 2)

[49] The annual maximum reward of $2 million allocated among the Companies using a 70/15/15 split is also consistent with D&O 37507.

[50] D&O 37507 at 145 references 306,368 total customers on O'ahu, which is Hawaiian Electric's customer count as of December 31, 2019. Hawai'i Electric Light and Maui Electric's customer counts as of December 31, 2019, are 86,576 and 72,522, respectively.

[51] Timing frequency that load data is measured from advanced meters.

AMI interval data collection and accessibility via customer portals[52]; or 3) enabling enrollment and participation in DER, DR, TOU, or other advanced programs[53] are calculated as follows:

	2021	2022	2023
Hawaiian Electric	30,637	76,592	137,866
Hawai'i Electric Light	8,658	21,644	38,959
Maui Electric	7,252	18,131	32,635
Total	46,547	116,367	209,460

Considering the Commission's proposed Metric No. 2 is not focused on enabling customer AMI utilization, but rather on minimizing opt-outs or convincing customers to change their minds from opting out, which, as discussed above, is to some degree out of the Companies' control, the Companies' position is this proposed metric will be less effective than Metric No. 1, and should not be implemented. The Companies also emphasize that significant motivation already exists to maximize customer engagement efforts and minimize customer opt-outs. In particular, the existing telecom unit-cost caps as approved by the Commission in Decision and Order No. 36230 ("D&O 36230"), issued on March 25, 2019 in Docket No. 2018-0141,[54] incentivize the Companies to deploy as many meters as possible within each network coverage area in order to ensure cost recovery.

In its Statement, the Consumer Advocate states that without data, it is reluctant to offer any recommendations regarding the PIM reward amount as it could be contrary to customers' interests[55] and urges the Commission to consider reported metrics and/or scorecards that would

[52] 15-minute interval data accessible to the customer via Energy Portal.
[53] Advanced meters utilizing an MDMS and SAP systems prepared to handle necessary billing register reads and rates.
[54] D&O 36230 at 24-27.
[55] *See* Consumer Advocate Statement at 18.

target gathering information to: 1) not only evaluate the performance of the Companies in this area; but 2) also to provide information to evaluate possible metrics and targets that focus on the services and benefits being delivered to customers and the grid.[56] The Consumer Advocate suggests that if the Commission is inclined to move forward with a PIM for AMI utilization, it should use as a suggested target the actual number of customers on a TOU schedule set at 90% of 125% of meters that should be in place according to the deployment timeline, which equates to 196,875 customers on TOU.[57]

The Hawaiian Electric Companies respond that participation in TOU rates that is enabled by advanced meters is more appropriately addressed in the ongoing Advanced Rate Design ("ARD") Track in Docket No. 2019-0323. Deployment of advanced meters does not automatically enable a customer opportunity to participate in TOU rates. There are several reasons for this: 1) while the Companies are poised to deploy advanced meters very soon, approval and establishment of new TOU rates in the ARD Track remain under consideration; 2) not all advanced meters placed will be initially eligible for new TOU rates; the Commission's guidance in the ARD Track is to prioritize advanced rates for schedules R, G, and J;[58] and 3) both the Companies and the Consumer Advocate have proposed a lag of at least three months between deployment of advanced meters and customer placement on TOU rates, to establish baseline TOU usage data and to give customers the opportunity to familiarize themselves with their energy usage throughout the hours of the day.[59]

---

[56] Consumer Advocate Statement at 20.
[57] *See* Consumer Advocate Statement at 21.
[58] *See* Transmittal Letter from the Commission re *Notice for Technical Conference on March 24, 2021* filed on March 10, 2021, in Docket No. 2019-0323 at 2.
[59] *See Hawaiian Electric's Advanced Rate Design Initial Proposal* filed on December 17, 2020, Attachment 1, at 35-36 and the *Division of Consumer Advocacy's Advanced Rate Design Final Proposal* filed March 15, 2021, at 35-36.

The County of Hawai'i recommends AMI data optimization from the Companies to not be limited to 100% installed smart meters but include robust plans for demand side programs and new tariffs as a direct result of managing more timely (real time, incremental, time stamped) data[60] and recommends 9 metrics for evaluating progress towards demand side benefits pre-and-post AMI installations.[61]

The Hawaiian Electric Companies appreciate the County of Hawai'i's suggestions but respond that these metrics are not ready to be implemented as a part of this PIM by June 1, 2021. Several of the proposed metrics ("number of critical pricing/load management events," "average utility-paid demand reduction during critical pricing event," and "average utility-paid energy reduction during critical pricing event (or other DSM program rebate scenario)") are reported in the Companies' reports on their Demand Response programs, although such programs are related to called Demand Response events rather than critical "pricing" events. Critical peak pricing options have been discussed in the aforementioned ARD Track. If approved critical peak pricing options emerge in the future from the ongoing ARD review, tracking and performance measurement / possible PIMs would also appropriately be considered in the ARD Track of Docket No. 2019-0323. The County of Hawai'i's two proposed metrics related to home energy reports are not necessary because home energy reports and the customers selected to receive these reports are managed by Hawaii Energy, and collaboration with Hawaii Energy is incentivized by the LMI/EE PIM.

[60] *See* COH Refined PBR Proposals at 13.
[61] *See* COH Refined PBR Proposals at 14.

Finally, with regard to necessary details in support of AMI utilization and PIM implementation, Order 37557[62] states, "Second, the evaluation period for the LMI Energy Efficiency PIM and AMI Utilization PIM will begin with the effective date of the applicable tariffs" and that the "Commission will remain open to considering adjustments to the PIM evaluation period for all PIMs based on the results of the Post-D&O Working Group."[63] D&O 37507 states that the Prioritized Performance Mechanisms tariffs are expected to take effect on June 1, 2021.[64]

The Companies submit that although the AMI Utilization PIM will take effect on June 1, 2021, there is no need to prorate the $2 million annual potential reward for 2021. The AMI Utilization PIM targets proposed by the Companies are based on number of cumulative customers with advanced meters delivering benefits, so the target for 2021 should not be prorated. Planning and efforts to deploy advanced meters have been ongoing throughout the year and prior.

III. SCORECARDS AND REPORTED METRICS

As a part of D&O 37507, the Commission reiterated "that a portfolio of Scorecards and Reported Metrics will be included as part of the PBR Framework and that development of this portfolio will be a priority for the Post-D&O Working Group."[65] As noted by the Commission, "these non-revenue mechanisms are intended to drive further development of the PBR Framework during the MRP by facilitating the collection and reporting of relevant data (Reported Metrics) and evaluating the Companies' performance compared to

---

[62] Order No. 37557 *Granting the Hawaiian Electric Companies' Motion for Partial Clarification and/or Reconsideration of Decision and Order No. 37507, filed January 4, 2021* issued in this proceeding on January 15, 2021 ("Order 37557").
[63] Order 37557 at 17 and 18.
[64] *See* D&O 37507 at 165.
[65] D&O 37507 at 156.

Commission-established benchmarks or targets (Scorecards)." Due to the "nascent nature of some of these metrics, attaching financial incentives at this time is premature, but with the accumulation of reported data promoting greater understanding of the Companies' performance, they may serve as the basis for future PIMs or SSMs."[66]

The Commission observed that "Phase 2 has yielded a wide range of proposed Scorecards and Reported Metrics, and the Post-D&O Working Group should focus on narrowing and refining these proposals in preparation for implementing an initial portfolio of Scorecards and Reported Metrics, expected by June 1, 2021."[67] To facilitate discussion, the Commission stated its interest in focusing on the development of Scorecards and Reported Metrics for certain specific PBR Outcomes. For Scorecards, the Commission identified the outcomes of Interconnection Experience, Cost Control, Customer Engagement, GHG Reduction, and Electrification of Transportation.[68] For Reported Metrics, the Commission identified the outcomes of Affordability, Customer Equity, Capital Formation, Grid Investment Efficiency, Resilience and DER Asset Effectiveness.[69] The Commission noted in D&O 37507 that while the "specific metrics identified as minimum requirements above are not intended to be an exhaustive list of areas for Scorecard and Reported Metric development" they are "metrics that the Commission views as necessary to include based on experience developing PIMs during Phase 2 of this proceeding."[70] As discussed further in the Companies' response to PUC-HECO-IR-30, in the Companies' Phase 2 Reply Statement of Position, and below, given the limited time to discuss and develop these proposals, as well as the cost to the Companies in terms of both human

[66] *Id.* at 156-157.
[67] *Id.* at 157 (emphasis supplied).
[68] *Id.* at 157-159.
[69] *Id.* at 159-160.
[70] *Id.* at 160 (emphasis supplied).

and monetary resources, and with respect to the guiding principles of Administrative Efficiency and Utility Financial Integrity, the Companies have limited their refined proposals for Scorecards and Reported Metrics to those specific outcomes that the Commission stated are "necessary to include" at this stage of the proceedings. As further explained later in this updated refined proposal and reply statement of position, the Companies also oppose at this time adoption of metrics proposed by other parties for outcomes that were not specifically requested in D&O 37507.

The following are the Companies initial refined proposals for Scorecards and Reported Metrics:

A. SCORECARDS

1. Interconnection Experience

For the Interconnection Experience outcome, the Companies support the Scorecards identified by the Commission in D&O 37507 (i.e., time and cost to connect to the network, by DER and Independent Power Producer ("IPP"); customer satisfaction results for both DER and IPP interconnections; and truck roll-related/responsiveness times for both DER and non-DER customers)[71] with the following comments and proposed scorecard details:

a) Time and cost to connect to the network, by DER and Independent Power Producer ("IPP").

- DER – Time: Utilize PIM tracking (energization). The time for DER customers to interconnect and energize their systems will already be tracked as a part of the Interconnection Approval PIM.

- DER – Cost: This element of the Scorecard may need additional clarification regarding what is meant by "cost to connect to the network" for DER customers. If it is intended to mean costs that the Companies charge DER customers to interconnect, then generally speaking those costs will essentially be zero.[72] For several years, the Companies have

[71] *Id.* at 157.

[72] There may be a rare situation where a customer will choose to proceed with an interconnection study and the possibility of paying for upgrades rather than activating volt-watt as a mitigation.

predominantly relied on customers voluntarily activating volt-watt for their advanced inverter as a mitigation to interconnection challenges. There is no cost to the customer associated with this mitigation.

- IPP – Time: Provided as Exhibit D is a process flow containing swim lanes for the developer and the Companies. The scorecard would track the time attributable to the Companies to complete tasks in the process flow for Stage 2, CBRE (for mid-tier and large projects), and any Stage 3 RFP.

- IPP – Cost: For purposes of this Scorecard, the Companies have interpreted "cost to connect to the network" as the cost for Company-owned interconnection facilities paid for by the IPP, but developed by the utility and included in the PPA. This metric will be difficult to define precisely as every project is unique at this level and costs are highly dependent on the point of interconnection and if that interconnection is at the distribution or transmission level. Unit cost information provided with the RFPs can be used to determine baseline costs. The scorecard will also track costs for the interconnection requirements study.

For both DER and IPP, ongoing improvement efforts to the interconnection process are being considered and implemented in other proceedings, such as CBRE and DER. The results of these efforts will be reflected in the Interconnection Experience Scorecard. Further, future improvements to interconnection processes and procedures may warrant modifications to the scorecard as proposed.

b) Customer satisfaction results for both DER and IPP interconnection (PUC)

- DER – The Companies formerly sent customer satisfaction surveys to DER customers who had interconnected systems. The survey asked customers to rate their satisfaction with the Companies as well as their solar contractor. The Companies received valuable feedback from these surveys. The Companies intend to update and improve the surveys based on feedback from solar contractors and stakeholders. As an initial Scorecard, the Companies propose to send the surveys to 100% of DER customers. As the Companies establish a baseline for the survey, the Companies are open to modifying the target for this Scorecard to be based on the Companies' performance. Because the customer's interconnection experience is based just as much, if not more, on their experience with their contractor, it is important to continue to track and share survey results on contractor performance along with the Companies' performance.

- IPP – Satisfaction surveys to be sent to IPPs after projects are in service. The Scorecard will track that surveys are sent to all new IPPs and conducted within 6 months of commercial operations. Survey will seek IPP feedback about the interconnection

experience, including contract negotiation, IRS, IRS Amendment (if applicable), construction of company-owned interconnection facilities, testing, and reaching commercial operations. Scorecard will provide a summary of key results.

This Scorecard would allow the Companies to set a baseline for the IPP interconnection process which is inherently different for each project depending on the size, location, and project technology. Such baseline could then be used to determine if future Shared Savings Mechanisms may be appropriate for this process.

c) Truck roll-related responsiveness times for both DER and non-DER (PUC)

The Companies propose an average of ten business days (or fourteen calendar days) for the target duration for meter replacement work for both DER and non-DER customers. This Scorecard would be measured on a per Company basis and measured annually based on the average number of business days it takes to complete work related to meter replacements that are in the Companies' control. Meter replacement durations for DER customers will already be tracked as a part of the Interconnection Approval PIM. For administrative efficiency, the Companies recommend that tracking be consistent with the requirements of the Interconnection Approval PIM. Thus, for example, tracking for DER customers for the Scorecard will be consistent with the definition of work time that is in the Companies' control and will be limited to DER systems less than 100 kW in size.

As background to this proposal, the only truck rolls that occur for all DER customers that also impact non-DER customers are for meter replacement. Therefore, the Companies propose to limit this Scorecard to tracking truck rolls related to work for meter replacements. As additional background for this work, the Companies provide the following information:

- Each Company's Meter Shop, with assistance from Field Services and Transmission & Distribution Operations Crew (Hawai'i Electric Light only), is responsible for installing,

removing, replacing, and testing meters and provides service to both DER and non-DER customers.

- Because a multi-register net meter is required for DER interconnection, a meter change of a customer's existing revenue meter is needed. Currently, Maui Electric and Hawai'i Electric Light are also installing Customer Grid-Supply Plus ("CGS Plus") production meters in addition to the required revenue meter change. For O'ahu, CGS Plus production meters are not currently being installed. However, once AMI or "smart meters" are more readily available, they will be deployed instead.

- Workflow is structured to capture efficiencies by batching whenever possible, which is especially critical for distant locations. The meter installation process typically takes up to ten business days to complete, except for installations on Lana'i and Moloka'i, which can take longer since interisland travel is required.

The target average of ten business days (or fourteen calendar days) aligns with the Meter Shop's internal target for purposes of achieving end-to-end process targets for the Interconnection Approval PIM and to the Meter Shop's overall internal target for completing their work based on current resources and priorities. This also addresses the Commission's concern that providing a financial incentive to reduce "truck roll" times for DER interconnection could incent the Companies to prioritize dispatch of resources for DER-related purposes over other customer services. Further, when dispatching personnel, the Companies assign top priority to safety and hazard condition remediation and consider efficiencies especially for distant locations and similar work that can be time batched together.

- For Hawai'i Electric Light, because the Meter Shop personnel operate only out of Hilo, their meter work in North Hawai'i and West Hawai'i is accumulated and addressed at designated times as personnel have to stay overnight in Kailua-Kona or Waimea for maximum efficiency.

- For Maui Electric, due to logistics and added travel time, meter work on Lana'i and Moloka'i is accumulated before sending personnel in order to provide a full day of work for maximum efficiency.

- Other considerations include escalations (customer complaints), the Companies' initiatives and special projects such as AMI deployments, ANSI meter changes, dog bite prevention meter installs, and Class Load Studies. Often these other considerations take priority or have a defined completion date associated with them.

Overall, the daily, weekly and mid-term prioritization is more of a balancing act. The Companies do not have the level of internal resources available that allow for dedicated focus on any one particular type of service need for a prolonged period. Therefore, dispatching is governed to maximize efficiency of the Companies' limited resources which is more by grouping of work tasks in given geographical areas.

2. Cost Control

D&O 37507 directed that this particular Scorecard should "align with Post-D&O Working Group efforts to develop a future SSM for cost control via reductions in fossil fuel consumption and purchased power."[73] While the Companies look forward to working with the Post-D&O Working Group to develop a future SSM for cost control via reductions in fossil fuel consumption and purchased power, at this time, and in support and anticipated alignment with those future, efforts, the Companies propose the following Scorecard for the Cost Control outcome.

The proposed baseline and targets for this Scorecard are as follows:

a) Energy Cost Recovery Factor Rate Charged to Customers Under the ECRC

The Companies propose the baseline metric to be the Energy Cost Recovery Factor ("ECR") rate charged to customers under the Energy Cost Recovery Clause ("ECRC") and the target would be a moving average of the same value, for each island.

Cost recovery for fossil fuel use and energy purchases (fossil fuel and renewable) is administered through the ECRC.[74] Each month the Companies set an ECR rate in cents per kWh

[73] D&O 37507 at 157-158.

[74] The Companies acknowledge that the costs of purchased power contracts acquired under the RFP Phase 1 and Phase 2 solicitations will be recovered through the Purchased Power Adjustment Clause. The Companies are not including the costs of those contracts in the proposed scorecard, but are willing to discuss appropriate metrics and targets for this purchased power service.

for that cost recovery.[75] The rate under the ECRC reflects fuel and purchased energy use as well as the current prices for such use. This makes the ECR rate a simple but comprehensive metric for the tracking of overall costs of fuel and purchased energy and its impact on customer bills.

The proposal to use a moving average is intended to provide a meaningful target that also incorporates changes in both external market conditions as well as the Companies' responses to those conditions. Use of a moving average smooths the impact of changes in market prices of fuel oil as well as changes in customer demand for energy. Changes in how the Companies operate to provide customer energy, including introduction of new purchased power contracts and operational adjustments to serve increased customer DER load are also effectively captured in a moving average. The Companies suggest that the moving average period be sufficiently long in order to fairly balance the effects of fuel oil market price increases and decreases.

Provided as Exhibit E is a graph of Hawaiian Electric's (O'ahu's) ECRC rate[76] versus its 48-month and 60-month moving average between 2014 and 2020 to illustrate the proposed metric and target.

Through the Consumer Advocate's Statement, the Consumer Advocate suggests a scorecard for this outcome which would include the Companies' average of recent levelized cost of energy ("LCOE") for PPAs with proposed targets including: the Companies' avoided cost; or the mid-point of the average LCOE that is reported in the annual Lazard's Levelized Cost of Energy and Levelized Cost of Storage report ("Lazard's Report").[77] The Companies do not support this proposed Scorecard because the fixed price of a renewables contract may not be

---

[75] Copies of the Companies' monthly Energy Cost Recovery Factor filings are available on the Companies' website at https://www.hawaiianelectric.com/billing-and-payment/rates-and-regulations/energy-cost-filings.
[76] The ECRC took effect January 1, 2019 at Hawaiian Electric. Among other things, the ECRC unbundled fuel expense and purchased power expense from base rates. For the months prior to January 1, 2019, the sum of the ECA from the Energy Cost Adjustment Clause for the month plus the applicable Base Fuel Energy rate was used.
[77] Consumer Advocate Statement at 23.

indicative of the impact to customer bills given that bill impact depends, among other factors, on the actual renewables production and the dispatch of the renewable generation and/or related renewable storage. Further, the identified target, either the Companies' avoided cost (as calculated per Docket No. 7310, it is a blend of fuel cost and purchased power energy cost) or the Lazard LCOE, does not necessarily track with the Companies' actual costs.

The Consumer Advocate also proposes a scorecard for the Companies' average of recent levelized cost of energy ("LCOE") for fuel with the following proposed targets: the Companies' avoided cost; or the average LCOE for Gas Peaking on Lazard's Report.[78] This proposal should also not be adopted at this time because it is not clear how a levelized cost of fuel would be determined and whether it would be representative of actual fuel costs, which are only part of the ECRC component of the bill. As with the Consumer Advocate's first proposal, the identified target, either the Companies' avoided cost (as calculated per Docket No. 7310, it is a blend of fuel cost and purchased power energy cost) or the Lazard LCOE, does not necessarily track with the Companies' actual costs.

The County of Hawai'i proposes a scorecard for the total utility costs per residential customer ($/customer); and total utility O&M costs per residential customer ($/customer).[79] In its proposal, the County of Hawai'i "recognizes and agrees that more stakeholder work could be done to implement this scorecard, including at least one workshop that would be designed to establish an appropriate group of peer utilities for benchmarking purposes and to establish an agreed upon definition of O&M."[80] This proposal should not be adopted at this time. As the County of Hawai'i notes in part, additional work to identify, evaluate and develop any type of

[78] Consumer Advocate Statement at 24.
[79] County of Hawai'i's Refined PBR Proposals at 15.
[80] *Id.*

meaningful peer comparison, including ensuring that any peer group is relevant, not overly broad, and appropriately reflects the operational benchmarks for the Companies, would be required prior to consideration of this proposal. This would include discussion of necessary exclusions for expenditures that are mandated by third parties or outside the control of the Companies.

3. Customer Engagement

For the Customer Engagement outcome, the Companies address the Scorecards identified by the Commission in D&O 37507, i.e., customer participation and retention in utility programs including but not limited to, TOU rates, Demand Response, and DER programs (in both absolute and percentage terms; and customer access to and engagement with the customer portal and Green Button Connect My Data)[81] with the following comments and proposals:

a) Customer participation and retention in utility programs including but not limited to, TOU rates, Demand Response ("DR"), and DER programs (in both absolute and percentage terms).

The Companies support the inclusion of customer participation and retention in TOU rates, DR, and DER programs in the portfolio of scorecards. However, given that the development of new TOU rates and their rollout are currently being actively examined in the ARD Track of the DER Policies proceeding (Docket No. 2019-0323), that the legacy DR programs (e.g., Residential Direct Load Control ("RDLC") and Commercial & Industrial Load Control ("CIDLC") programs) are in maintenance mode, and that the long-term successor DER programs are also currently being developed in the Program Track of the DER Policies proceeding, the Companies propose that participation and retention in TOU rates, DR, and DER programs be included in the portfolio of metrics as opposed to treated as scorecards, until new

[81] D&O 37507 at 158.

TOU rates are established and the new DER programs based on grid services are launched, and data can be collected to establish performance baselines and targets.

Regarding TOU rates, the Companies currently report on the number of customers enrolled in TOU rates quarterly on the existing Key Performance Metrics website, and propose to continue that reporting through the new performance website. The Companies additionally propose to report on the number of customers enrolled in TOU rates established in the ARD Track of the DER Policies proceeding, as a percentage of the number of customers who receive advanced meter placements by rate schedule on a consolidated basis, with Net Energy Metering customers excluded from this calculation. Net Energy Metering customers with little or no billed usage would be significantly less likely to consider TOU rate options and should be excluded.

The legacy DR programs (e.g., RDLC and CIDLC programs) are currently subject to program caps and are in maintenance mode where attrition and replacement of program participants are a normal part of their current cycle. For the newer DR programs utilizing aggregators, the aggregators are contracted by MW performance, not by customer count. Participation and retention may be a component of delivering increasing MW, but total customer count may not correlate with MW increases. In the Demand-Side Management ("DSM") proceeding, Docket No. 2007-0341, the Companies filed a request in the Modification and Evaluation ("M&E") Report in November 2020, to initiate a budget request to transition the existing DR programs to newer technology and potentially new programs currently being developed in the Program Track of the DER Policies proceeding.

The existing DER programs (i.e., Net Energy Metering, Net Energy Metering Plus, Customer Self-Supply, Customer Grid-Supply, Customer Grid-Supply Plus, and Smart Export) are either fully subscribed and closed, or subject to program caps. The NEM program is fully

subscribed and has been closed since October 2015. Customer Grid-Supply is closed but applications are being accepted as capacity becomes available to reach the threshold. Customer Grid-Supply Plus and Smart Export are advancing toward their program caps.[82] As such, participation and retention in DER programs may not be useful as a scorecard at this time. The Companies currently do not track the retention rate of customers in their interim DER programs. The Companies are, however, currently developing a Standard DER Tariff in the DER Policies proceeding for customers to migrate from the existing DER programs into the long-term successor DER programs. The Companies will be able to report on the customer count under the new DER program tariffs currently being developed in Docket No. 2019-0323.

The Companies would thus prefer to report on TOU, DR, and DER participation and retention as a metric, until new TOU rates are established in the ARD Track and a path is established to transition the existing DR and DER programs to the new DER programs based on grid services, and data is collected to form the basis of baselines and targets. As part of this metric, the Companies propose reporting on the customer counts participating in DR programs and grid services programs annually in the Accomplishments and Surcharge ("A&S") Report every March in Docket No. 2007-0341, to continue quarterly reporting of the number of customers on TOU rates through the new performance website, and to report the number of customers on TOU rates established in the ARD Track of the DER Policies proceeding, as a percentage of the number of customers who receive advanced meter placements by rate schedule on a consolidated basis, with NEM customers excluded from this calculation.

[82] *See Hawaiian Electric's Notification Regarding Smart Export and Customer Grid Supply Plus Program Capacities*, filed on January 29, 2021, in Docket No. 2019-0323. On April 7, 2020, the Commission issued Order No. 37714 in Docket No. 2019-0323, increasing the program capacity for Hawaiian Electric's Customer Grid-Supply Plus program on Oahu by 15 MW, to a total of 50 MW.

The Consumer Advocate in its Statement proposes a scorecard for the percent of customers participating in time-sensitive tariffs by customer class set at the percent of customers with AMI.[83] Similar to the Companies' proposal regarding customer participation and retention in TOU rates, DR, and DER programs, the Companies' position is that customer participation in time-sensitive tariffs should be treated as a metric until new TOU rates are addressed in the ARD Track of the DER Polices proceeding (Docket No. 2019-0323) and data can be collected and evaluated to establish a target for a scorecard. As discussed in the AMI Utilization section (Section II.C), participation in TOU rates that is enabled by advanced meters is more appropriately addressed in the ongoing ARD Track in Docket No. 2019-0323. Deployment of advanced meters does not automatically enable a customer opportunity to participate in TOU rates, for several reasons: 1) the approval and establishment of new TOU rates in the ARD track remains under consideration; 2) the Commission's guidance in the ARD track is to prioritize advanced rates for schedules R, G, and J,[84] and not all advanced meters placed will be initially eligible for new TOU rates; and 3) both the Companies and the Consumer Advocate have proposed a lag of at least three months between the deployment of advanced meters and customer placement on TOU rates, to establish baseline TOU usage data and to give customers the opportunity to familiarize themselves with their energy usage throughout the hours of the day.[85]

[83] Consumer Advocate Statement at 24-25.
[84] *See* Transmittal Letter from the Commission re *Notice for Technical Conference on March 24, 2021* filed on March 10, 2021, in Docket No. 2019-0323 at 2.
[85] *See Hawaiian Electric's Advanced Rate Design Initial Proposal* filed on December 17, 2020, Attachment 1, at 35-36 and the *Division of Consumer Advocacy's Advanced Rate Design Final Proposal* filed March 15, 2021, at 35-36.

b) Customer access to and engagement with the customer portal and Green Button Connect My Data.

In D&O 37507, the Commission requested the stakeholders to develop a Customer Engagement Scorecard, which should at a minimum include Scorecards related to customer access to and engagement with the customer portal and Green Button Connect My Data.[86]

(1) Customer Engagement Proposal - Customer Portal Usage

The Companies' online Utilities Customers E-Services Portal ("customer portal") allows customers to access their electric bill, manage their services (e.g., start/stop/move), sign up for automatic bill payment, and make one-time payments. Most residential customers and smaller businesses have the option to sign up for services through this customer portal. Large key commercial accounts and collective accounts do not have the option to create an account through this customer portal and instead have access to another portal created for them.[87] The Companies recommend adopting the Companies' Customer Portal Usage Scorecard proposed during Phase 2 of the PBR proceeding with one slight modification. The Companies propose to measure usage targets based on the average monthly unique page views as described in the Companies' response to PUC-HECO-IR-29,[88] as opposed to measuring usage targets by average daily unique views as described in the Companies' Statement of Position filed in the subject proceeding on June 18, 2020. As noted in their response to PUC-Parties-IR-10, the Companies are proposing this modification since most customers access the customer portal on a monthly rather than daily basis to view and pay their bills. As the customer portal evolves and becomes

[86] D&O 37507 at 158.
[87] Web analytics is not currently tracked by residential and commercial customers, because the data regarding monthly unique page views are not associated to specific customers.
[88] *See* the Companies' response to PUC-HECO-IR-29, filed on September 16, 2020, in Docket No. 2018-0088.

more robust with the enhancements from the energy portal, the Companies could revisit adjusting this metric to assess if daily unique views as a % of customers is a better measurement.

This metric will measure customer usage of customer portal against usage targets. Usage targets are reflected as a percentage of the average monthly unique page views against the total number of customers who have access to the customer portal. As the Companies advance into a modern grid future, the customer portal will serve as the foundation for customer engagement. This will include new program offerings, bill comparisons, electricity consumption data and more. Gauging customer interactions with this tool will serve as a meaningful measure of how the Companies are doing at engaging with customers across a variety of initiatives. The Companies propose that the targets for this scorecard be set at 50%, 55%, and 60% of customers with access to the customer portal for the years 2021, 2022, and 2023 respectively. Data for this scorecard would be published annually.

(2) Customer Engagement Proposal - Green Button Connect Registration

The Companies will launch their Energy Portal in April 2021. Among its various functions, it will allow customers to:

- Download their data with Green Button Download My Data;
- Authorize third-party vendors to access their data with Green Button Connect My Data.

Additionally, the Energy Portal will include functionality for the Companies to:

- Manage Green Button Connect My Data, including registration, customer authorization and data exchange for third party vendors.

Green Button Connect registration is required for each third-party vendor before any customer can request to provide the third-party vendor access to their energy data. Because the registration process for a third-party vendor requires the third-party vendor to understand Green

Button and the technical specifications in order to certify for access, the Companies are currently uncertain how many third-party vendors will be able to complete the registration process. Therefore, the Companies will endeavor to streamline the registration process, to include but not be limited to: 1) provide help text in the registration process area; and 2) coordinate with third-party vendors to make available Green Button resources.

In D&O 37507, the Commission requested the stakeholders to develop a Customer Engagement Scorecard, which should at a minimum include scorecards related to customer access to and engagement with the customer portal and Green Button Connect My Data. At this time, because the Companies will be launching its Energy Portal in April 2021, the Companies propose implementing the following metric as a first step. The data collected could then be used to develop targets for a future Green Button Connect Scorecard.

The Companies propose to measure total number of active registrations for Green Button Connect by a third-party vendor and total number of customers who access Green Button Connect data. Green Button Connect data allows a third-party vendor to gain easy access to customer electric usage data after consent from the customer. The Companies propose to collect metrics on the number of active registrations by third-party vendors that will use the Green Button Connect feature, and the number of customers who will be provided access to such information through the third-party vendor. Since access to Green Button data is a new feature, the Companies recommend waiting to collect enough metrics before setting appropriate targets.

The Companies propose to set targets in January 2022 after nine months of Green Button registration deployment and data availability. Data for this metric would be published annually.

The Consumer Advocate proposes scorecards for the "number and percent of customers that have used Green Button Connect (i.e., number of customers that used Green Button Connect

over number of customers)" with the number and percent of customers using the Green Button Connect set at the number of customers that are consistent with the proposed schedule of AMI rollout and percent of customers with AMI;[89] and the percent of customers participating in time-sensitive tariffs, by customer class with the percent of customers participating in time-sensitive tariffs, by customer class, set at the percent of customers with AMI.[90] These proposals should not be adopted as scorecards at this time because the Companies are currently proposing new TOU rates that are pending review. Because they will be so new (assuming approval), these proposals should be reported, if at all, as metrics first until an appropriate baseline can be developed to support targets.

4. GHG Reductions

Consistent with the absolute emissions and emissions intensity scorecards (with annual declining targets) for the GHG Reductions outcome specified in D&O 37507,[91] the Companies propose the following:

a) Absolute Emissions

The Companies propose a scorecard that reports GHG emissions in carbon dioxide equivalent ("CO_2e") emissions per year in metric tons (excluding biogenic carbon dioxide) from all major sources that supply electricity to the Oʻahu, Maui County and Hawaiʻi Island grids on a consolidated basis as reported to the Hawaiʻi Department of Health ("DoH") and the Environmental Protection Agency ("EPA"), which includes generators owned by both the Hawaiian Electric Companies and IPPs.[92]

[89] Consumer Advocate Statement at 24.
[90] *Id.*
[91] D&O 37507 at 158.
[92] Also includes transmission and distribution sulfur hexafluoride (SF6) emissions from gas insulated equipment.

The proposed scorecard targets are set as reductions from a 2010 baseline. The 2020 reduction goal is consistent with current DoH rules requiring a 16% reduction from the 2010 baseline.[93] Subsequent targets are set consistent with the pace of the State's RPS goals for 2030, 2040, and 2045 as established by statute, interpolated between milestone dates. This results in a target of a 28% reduction in 2030, a 64% reduction in 2040 and 100% reduction in 2045 compared to the 2010 baseline.

Provided as Exhibit F is the Hawaiian Electric Companies' proposed targets and historical performance as reported to the DoH and EPA. Preliminary data from the DoH and EPA is available by April of each year. Finalized numbers will be provided after the EPA and DoH verify the data.

b) Emissions Intensity

The Companies propose an emissions intensity scorecard that would be reported as follows:

- Emission Intensity in CO_2e intensity per year in grams/kWh = Absolute Emissions/Total kWh
- Absolute Emissions: As proposed to be reported above.
- Total kWh: As reported for the RPS-A PIM.

The proposed scorecard targets are set as reductions from a 2010 baseline. The 2020 reduction goal is consistent with current DoH rules requiring a reduction of GHG gases of 16% reduction from the 2010 baseline. Subsequent targets are set consistent with the pace of the State's RPS goals for 2030, 2040, and 2045 as established by statute, interpolated between

[93] In July 2007, the State Legislature passed Act 234, which requires a statewide reduction of GHG emissions by January 1, 2020 to levels at or below the statewide GHG emission levels in 1990. On June 20, 2014, the Governor signed the final rules required to implement Act 234 and these rules went into effect on June 30, 2014. In general, Act 234 and the GHG rule require affected sources that have the potential to emit GHGs in excess of established thresholds to reduce their GHG emissions by 16% below 2010 emission levels by 2020.

milestone dates. This results in a target of a 28% reduction in 2030, a 64% reduction in 2040 and 100% reduction in 2045 compared to the 2010 baseline.

Provided as Exhibit F is the Hawaiian Electric Companies' proposed targets and historical performance calculated as described above.

The Consumer Advocate has proposed a scorecard for emission intensity (GHG emissions per mWh or kWh); with the proposed target as projected intensity for the given year as compared to the reported intensity.[94] This should not be a scorecard at this time. As discussed above, the Companies believe that the appropriate target for this scorecard should be set to align with state RPS goals and that various plans and projections can be compared against that benchmark.

5. Electrification of Transportation

During Phase 2 of the PBR proceeding, the Companies proposed adopting Ulupono Initiative's ("Ulupono") EoT PIM as a part of its PIM Portfolio to effectuate customer engagement. As noted by Ulupono, its EoT PIM proposal can cover a number of priority outcomes. According to Ulupono, the intended outcomes of their proposal are: (1) accelerate the reduction of imported fossil fuels (and the GHG) used in ground transportation; (2) increase the use of EVs; (3) increase deployment of metering at EV charging stations, enabling TOU rates for EVs, potentially DR and, in the future, V2G; and (4) lower electricity prices through decoupling – spreading costs over more kWh.[95]

In D&O 37507, the Commission acknowledges the broad support for the EoT PIM proposed by Ulupono, and clarifies that in selecting PIMs for the initial portfolio, it was focused on addressing the prioritized Outcomes identified in the Phase 1 D&O, which did not include

[94] *See* Consumer Advocate Statement at 26.
[95] Ulupono Initiative's Reply Statement of Position, filed on August 20, 2020, in Docket No. 2018-0088, at 112.

EoT.[96] Also in D&O 37507, the Commission provides the following guidance to developing a scorecard for the EoT outcome: "Scorecards for this area should prioritize identifying metrics and targets, and collecting data to inform a future PIM that incents increased Electric Vehicle ("EV") adoption and rapid deployment of EV charging infrastructure, while maintaining grid investment efficiency and integration of EV charging to align with system needs."[97]

The Companies agree that Ulupono's proposed assumptions for its EoT PIM proposed in Phase 2 are reasonable and can be adopted for the use of a scorecard with one modification. It is the Companies' understanding that the registered EV number does not currently capture government fleets. The Companies propose that government fleets be considered as a part of the total EV number to insure that ongoing efforts to work with governmental agencies and bodies continue to be incentivized. The Companies also propose that to the extent that this scorecard is adopted, updates to the assumptions used should be made every five years at a minimum.

a) Electrification of Transportation Proposal – Energy Delivered to Charge Electric Vehicles

The Companies propose measuring total energy delivered to charge electric vehicles, including electric buses. The objective of this scorecard is to demonstrate the impact on electric load from electric vehicle ("EV") charging, including electric buses. Increases in this beneficial load may improve renewable energy integration and drive the decarbonization of the transportation sector. There are multiple programs the Companies are developing, such as public charging, make ready, and EV specific rates. The Companies can measure the resulting energy delivered in kWh to charge EVs for these programs. However, the Companies also deliver

[96] D&O 37507 at 159.
[97] D&O 37507 at 158.

energy to charge EVs at the customer's discretion that are not measured through the Companies' programs.

This reported metric will estimate the total energy delivered to charge EVs, including electric buses, that are both measurable and unmeasurable. Measurable or metered EV charging is collected monthly by the Companies. For unmeasurable or non-metered charging stations, the Companies propose to use Ulupono Initiative's methodology described in reference to Ulupono's EoT PIM proposal. Ulupono's analysis estimates the kWh load based on (1) the number of registered EVs available from the SEO dashboard, (2) average miles per passenger vehicle available from DBEDT Databook, and (3) average efficiency of EVs (miles/kwh).

- Unmeasurable Load = # registered passenger electric vehicles x Average miles traveled x 0.31 kWh/mi
- Registered electric vehicles from SEO dashboard: http://dbedt.hawaii.gov/economic/energy-trends-2/
- Average miles traveled per passenger vehicle from DBEDT 2018 Databook, Table 18.17 was 9,011 miles. The 2019 Databook is now published and the value is 9,014 miles: https://files.hawaii.gov/dbedt/economic/databook/db2019/section18.pdf
- 0.31 kWh/mi = average fuel efficiency for vehicles available in Hawaii

Government fleets should be considered and added to the number of registered EVs, if the information can be obtained by the Companies, to ensure that ongoing efforts to work with governmental agencies and bodies continue to be incentivized.

The Companies' forecast for sales from electric vehicles, including electric buses, could be used as a target, and updated as the forecast changes.[98] The Companies will report this annually on a consolidated basis after the necessary data becomes available.

[98] Docket No. 2018-0165, Instituting a Proceeding to Investigate Integrated Grid Planning, Exhibit A: Review Point, A.1. Draft IGP Inputs and Assumptions, Appendix C at: https://www.hawaiianelectric.com/documents/clean_energy_hawaii/integrated_grid_planning/dkt_20180165_20210119_HECO_IGP_updated_workplan_review_point.pdf.

The Consumer Advocate has proposed a number of scorecards which should not be adopted at this time. The Consumer Advocate proposes the number of customers participating in an EV-TOU rate as a scorecard with the number of customers participating in an EV-TOU rate equivalent to 75% of the total number of EV cars as reported by DBEDT as a target.[99] However, a target of 75% in this context is ultimately outside of Company control. The number of cars reported by DBEDT is for registered vehicles which are likely residential customers. But not all residential customers may be able to participate in an EV-TOU rate (i.e., MUDs, rental).

The Consumer Advocate also proposes the number and percentage of EV vehicle miles of the Companies' fleet as a scorecard with the target set once the Companies can "provide some historical data on total vehicle miles as well as firming up their fleet conversion plans."[100] First, scorecard proposals without valid targets are metrics at best and are not ready to be adopted. Additionally, while the proposals are theoretically feasible, they do not "inform a future PIM that incents increased Electric Vehicle ("EV") adoption and rapid deployment of EV Charging infrastructure, while maintaining grid investment efficiency and integration of EV charging to align system needs" as described in the Commission's guidance in D&O 37507. The Companies' EOT scorecard proposal recognizes the importance of EoT and its contribution to meeting GHG reduction goals, while informing a PIM that would incent those goals on a larger scale, and therefore should be adopted.

Ulupono proposes scorecards for "kWh delivered at EV charging stations that are enrolled in existing EV tariffs, and upon approval proposed EV tariffs, which at this time are expected to include the following: EV-U, EV-F, EV-Bus, EV-Maui, and EV-J/P tariffs"; and "total kWh delivered to EVs based on: (i) number of EVs and average vehicle miles travelled

[99] Consumer Advocate Statement at 27.
[100] *Id.*

("VMT") (averages specific to Oahu, Maui, and Hawaii), and (ii) average kWh/mile (expected to be approximately 0.31)."[101] These are included as a part of the Companies' proposal above and do not need to be separately adopted and tracked.

Ulupono also proposes the "total number of registered EVs and total number of registered EVs as a percentage of registered light duty passenger vehicles" as a scorecard with a target equivalent to the "total number of EVs and/or penetration, as forecasted in the IGP plan for the applicable year."[102] This should not be a scorecard at this time because the Companies do not have auto sales data. DBEDT reports the number of registered vehicles already on a monthly basis and interested parties can calculate the applicable percentage using DBEDT's data.

Ulupono also proposes a scorecard for the "total number and percentage of EVs within the Companies' vehicle fleet by type, i.e., light passenger or heavy duty vehicles" with a target equivalent to the "degree of compliance with Companies' internal targets for conversion of vehicle fleet to EVs, and in the absence of such internal targets the percentage improvement over the previous year."[103] The Companies submit that this should not be a scorecard at this time. While this proposal is feasible, it does not "inform a future PIM that incents increased Electric Vehicle ("EV") adoption and rapid deployment of EV Charging infrastructure, while maintaining grid investment efficiency and integration of EV charging to align system needs" as described in the Commission's guidance in D&O 37507.[104] The Companies' EOT scorecard proposal recognizes the importance of EoT and its contribution to meeting GHG reduction goals, while informing a PIM that would incent those goals on a larger scale, and therefore should be adopted.

---

[101] Ulupono Initiative LLC's Proposed Scorecards and Reported Metrics ("Ulupono Proposal") at 2.
[102] *Id.* at 3.
[103] *Id.*
[104] D&O 37507 at 158.

B. REPORTED METRICS

D&O 37507 calls for reported metrics for the following outcomes: Affordability, Customer Equity, Capital Formation, Grid Investment Efficiency, Resilience, and DER Asset Effectiveness.[105] For those outcomes which the Commission did not specify metrics that the parties should include at a minimum in their refined proposal, notably Affordability, Capital Formation and Resilience, the Companies in their March 16, 2021 filing proposed metrics in the alternative for evaluation. Consistent with the Guiding Principles of Administrative Efficiency and Utility Financial Integrity, the Companies have further evaluated these proposals and have submitted a single recommended reported metric for each of these outcomes for the Commission's consideration. Where appropriate the Companies discuss herein the reported metrics proposed by the parties for the outcomes identified in D&O 37507 to further support or clarify the reasons why the Companies' proposals should be adopted for this iteration of the Reported Metrics. Where parties have proposed metrics for outcomes that were not specifically requested in D&O 37507, the Companies have addressed those proposals and the Companies' reasons for opposing their inclusion as a part of the Prioritized Performance Mechanisms at this time, in Exhibit G.[106]

1. Affordability

For an Affordability Reported Metric, the Companies propose to track the typical bill as a percentage of the annual income for a LIHEAP- eligible family of four.

---

[105] D&O 37507 at 159-160.

[106] The Companies have not expressly responded to general comments, concepts or proposals made by parties that are unrelated to the outcomes identified by the Commission for the Prioritized Performance Mechanisms or the specific direction contained in D&O 37507 relating to Scorecards and Reported Metrics. The Companies respectfully reserve their rights to respond to and address these types of general comments and will do so upon any request or direction from the Commission.

During the WG Meeting #3, the Commission's presentation, slide 30, included the Companies' recommendation to use the Percentage of Annual LIHEAP Income: Typical Monthly Bill as Percentage of Annual Income for LIHEAP- Eligible Family of 4 as a possible metric.[107] The Companies noted convergence with the Parties in the WG Meeting #3 discussion on this option and continue to support it. For the Percentage of Annual LIHEAP Income calculation, the Typical Monthly Bill is the annual cost for each month's typical monthly residential bill that is based on kWh consumption (i.e., 500 kWh for Oahu, Hawaii Island, and Maui and 400 kWh for Lanai and Molokai) provided monthly with each Company's Energy Cost Recovery Factor filing. The Annual Income for LIHEAP – Eligible Family of 4 data would be based on the LIHEAP Income Limits that are published each year to the public.

As support for the Companies' proposal, LIHEAP provides some connection to electric utility usage and provides a good income benchmark and all data used for this metric is readily and publicly available. Based on the Companies' proposal this metric would have provided the following results for 2020:

[107] *See also* PUC-HECO-IR-30 Attachment 1 filed in this proceeding.

	Typical Bill				
	Oahu 500 kWh	Hawaii 500 kWh	Maui 500 kWh	Lanai 400 kWh	Molokai 400 kWh
Jan-20	$ 155.97	$ 185.37	$ 168.57	$ 173.69	$ 153.75
Feb-20	$ 161.90	$ 189.22	$ 172.82	$ 168.65	$ 164.02
Mar-20	$ 160.64	$ 188.72	$ 174.41	$ 165.73	$ 167.23
Apr-20	$ 153.83	$ 179.61	$ 172.62	$ 151.15	$ 157.34
May-20	$ 148.21	$ 157.94	$ 166.06	$ 148.04	$ 151.00
Jun-20	$ 142.16	$ 151.51	$ 157.82	$ 131.79	$ 127.13
Jul-20	$ 137.84	$ 154.68	$ 154.77	$ 134.73	$ 118.42
Aug-20	$ 133.06	$ 170.16	$ 149.70	$ 140.41	$ 125.55
Sep-20	$ 137.57	$ 171.01	$ 149.08	$ 141.93	$ 135.41
Oct-20	$ 139.36	$ 169.56	$ 147.74	$ 141.69	$ 121.03
Nov-20	$ 138.03	$ 163.74	$ 150.47	$ 140.91	$ 132.92
Dec-20	$ 136.57	$ 161.87	$ 155.93	$ 140.89	$ 129.89
Total	$1,745.14	$2,043.39	$1,919.99	$1,779.61	$1,683.69
Typical Bill as % of LIHEAP Family of 4	3.9%	4.6%	4.3%	4.0%	3.8%

2020 LIHEAP Family of 4 Income Limit	$44,430

The LIHEAP income eligibility amount is published by the State of Hawaii Department of Human Services annually. This amount is recommended because it is based on information provided annually by the Federal government and the State sets the amount according to Federal Statute, with the energy needs of Hawaii customers in mind, which the Companies believe provides a good income benchmark. The typical residential bill will be provided as part of the calculation of the metric and will allow the parties to calculate typical bill as a % of any income metric that they might prefer to use for comparison purposes.

The Consumer Advocate proposed "average annual bill as a percentage of low-income average income" as a reported metric.[108] The Companies submit that given the Companies' proposal to offer the proposed annual income for a LIHEAP eligible family of four as representing "low-income average income" that the Consumer Advocate's and Companies' proposals are generally the same and therefore the Consumer Advocate's proposal is not necessary. The Consumer Advocate also proposed "average annual bill as a percent of median

[108] Consumer Advocate Statement at 31.

income for each island" as a metric[109] as did the County of Hawaii.[110] The Companies submit that this proposal should not be adopted as a reported metric because the Companies do not obtain income information for residential customers. Availability of the typical residential bill information will allow the parties to observe trends and fluctuations and allow any party to calculate the typical bill as a percentage of any income metric that they might prefer to use for comparison. Using the broad measure of 'median income for each island' is less targeted and possibly less effective at tracking "affordability".

The Consumer Advocate also proposes "percentage of customers by payment status" as a metric.[111] The Companies submit that this proposal should not be adopted as a reported metric at this time. While the number and amount of accounts receivable by aging or arrears "buckets" is available and currently reported in the Companies' monthly COVID reporting, it is unnecessary to report on this level of detail outside of an extraordinary situation like the one the State is currently experiencing. The tracking of detailed arrears beyond total accounts receivable for COVID reporting is necessary due to the moratorium on disconnections and the extraordinary impact the pandemic has had to the economy and the Companies. The Companies also note that their arrears balances are considered confidential and subject to the United States Securities and Exchange Commission ("SEC") disclosure rules. Any public release of this metric would be on a delayed basis after such information is released publicly in Hawaiian Electric Industries' earnings webcast and/or in the Companies' filings with the SEC.

The Consumer Advocate also proposes "annual number of customers disconnected due for non-payment reasons" as a reported metric.[112] The Companies note with regard to this

[109] *Id.*
[110] County of Hawaii's Refined PBR Proposals at 16.
[111] Consumer Advocate Statement at 31.
[112] *Id.* at 32.

proposal that their monthly COVID reporting (item #9) captures the number of customers disconnected by rate class per month. Depending on the duration of the pandemic and need for reporting this metric, this can be transitioned to PBR reporting in the future to avoid duplication. Please also refer to the Companies' Customer Equity Reported Metric proposal below for further discussion.

Ulupono proposes "kilowatt hour ("kWh") weighted average price of renewables compared to the avoided cost of fossil fuels" as a potential affordability metric.[113] The Companies submit that this should not be adopted as a reported metric at this time for the following reasons. The current definition of avoided energy cost from Docket No. 7310 includes both fuel costs and purchased energy costs. There is not an agreed-upon method to calculate the avoided cost of fossil fuels. In the longer term as more renewables enter the grid, the scale efficiencies of fossil units decline and may make comparisons misleading. Furthermore, the avoided cost of fossil fuels is not reflected in customer bills. The fixed price of a renewables contract may also not be indicative of the impact to customer bills since bill impact depends, among other factors, on the actual renewables production and the dispatch of the renewable generation and/or related renewable storage.

Additionally, the County of Hawaii proposes "average number of customers disconnected for non-payment" as a metric.[114] The Companies submit that this proposal metric is not necessary at this time. As discussed further below in the Companies' Customer Equity Reported Metric proposal, the Companies note that their monthly COVID reporting (item #9) captures the number of customers disconnected by rate class per month. Depending on the duration of the pandemic and need for reporting this metric, this can be transitioned to PBR reporting in the

[113] Ulupono Statement at Exhibit A,1.
[114] County of Hawaii's Refined PBR Proposals at 16.

future to avoid duplication. An average can be discerned from the actual amounts reported. In response to the County of Hawaii's proposal that the Commission adopt a reported metric for "average monthly bill as a percent of average LMI income,"[115] the Companies reiterate as noted above that they do not obtain income information for residential customers. However, using the typical residential bill information discussed above will allow the parties to observe trends and fluctuations, and allow any party to calculate typical bill as a percentage of any income metric that they might prefer to use for comparison.

2. Customer Equity

D&O 37507 states that reported metrics for customer equity should include:[116]

- Number and/or percentage of customers entered into payment arrangements with the Companies
- Number and/or percentage of disconnections by customer class

For the outcome of customer equity, the Companies propose, in alignment with D&O 37507, a metric for number and/or percentage of customers entered into payment arrangements. The Companies' monthly COVID reporting metric would capture the intent of what is being requested. Depending on the duration of the pandemic and the need for reporting, this metric may be transitioned to PBR reporting in the future to avoid duplication.

The second metric would be for the number and/or percentage of disconnections by customer class. The Companies propose that this metric be measured by rate class (ie. Schedule R, G, J, P, etc.) instead and limited to the number of disconnections with an annual reporting frequency. The use of rate class instead of customer class for this metric is recommended since the information is readily available to the Companies. The percentage of disconnection by

[115] *Id.*
[116] D&O 37507 at 159.

customer class can also be available; however, the related metric would require providing the total customer count for each rate class which is subject to SEC disclosure reporting requirements such that public disclosure would be on a lagged basis. Based on the Companies' proposal the metric would provide the following results for 2019 - 2020:

	2019 Number of Disconnections			2020 Number of Disconnections		
Rate Class	HECO	HELCO	MECO	HECO	HELCO	MECO
Sch. R	3,660	1,248	254	1,636	319	73
Sch G	262	118	14	129	18	1
Sch J	55	22	-	10	4	2
Total	**3,977**	**1,388**	**268**	**1,775**	**341**	**76**

With the exception of one disconnection completed in July 2020 due to fraud, the Companies completed their 2020 disconnections on or before March 2020 when they implemented a moratorium on disconnections in response to the COVID-19 pandemic.

Parties have proposed some similar metrics for this outcome as they have for the Affordability outcome and the Companies submit that they either are not necessary or should not be adopted at this time for similar reasons. For example, the Consumer Advocate suggests a metric for "number and percentage of LMI customers that are in payment plans."[117] As noted in part above, the Companies do not obtain income information for customers to provide the number and percentage of LMI customers that are in payment plans. However, the Companies' proposed reported metrics would provide the total number and/or percentage of customers entered into payment arrangements by rate class, for which LMI customer would be included in the Schedule R. The Companies are open to reporting on this metric as requested in the future once the definition of "LMI customers" in this context is defined. The Consumer Advocate also proposes a metric for the "number and percentage of customers that are disconnected by

[117] Consumer Advocate Statement at 35.

customer class (assuming that this is targeting disconnections for non-payment).[118] As noted above, this information is currently provided through the Companies monthly COVID reporting.

The Consumer Advocate also proposes a metric for "number and percentage of LMI customers participating in a community base renewable energy project.[119] The Companies note in response to this proposal that the CBRE Portal will be tracking the LMI status of subscribers and the number and percentage of LMI customers participating in CBRE will be reported in the CBRE docket which can be evaluated over time as to whether it should become a Reported Metric in the future. The Consumer Advocate also proposes a metric for "number of LMI customers accessing the customer portal."[120] The Companies submit that this metric should not be adopted at this time since the Companies do not currently track the number of LMI customers accessing the customer portal. This metric would require a two-step process requiring extracting customers who access the portal and then matching back that information with LMI data to determine those customers that have accessed the portal. This is complicated by the fact, as noted earlier, that the Companies do not collect income information on customers, so they would not be able to determine if a customer is defined as "LMI."

Ulupono proposes a metric for the total number and percentage of LMI participation in programs."[121] The Companies do not support such a reported metric because the majority of these programs require significant financial investment by the customer which the LIHEAP customers (since they are focused on paying for essentials such as shelter, food, utilities and childcare) most often do not have the resources for.

---

[118] *Id.*
[119] *Id.*
[120] *Id.* at 36.
[121] Ulupono Statement at Exhibit A,2.

3. Capital Formation

Consistent with the provisions of D&O 37507, the Companies support a proposed reported metric to track the megawatts of third party generation on the Companies' system. This metric would measure total megawatts of generation provided to the grid by non-utility entities. This metric could be broken out by resource type (i.e., utility scale IPPs, FIT, DER, etc.). This metric could also include these megawatts as a percentage of total generation on the system.

The level and percentage of third party-financed generation is a high level indication over time of third party ability to raise capital for these investments.

Data for this metric can be collected annually or semi-annually and provided by the Companies.

For this outcome, the Consumer Advocate proposed that the Companies be required to continue reporting of their credit rating and annual outlook.[122] Separate reporting of this information is not necessary as improving credit ratings is a key goal of the Companies and the Companies currently report credit ratings on their website. It would be duplicative to report these metrics in the PBR proceeding as well. Ulupono proposes a metric for the Total Market Value (or book value, if necessary) of all IPP owned assets and infrastructure compared to the total market value of all utility owned assets and infrastructure.[123] The Companies do not support this proposed reported metric because the Companies may not have access to the market value or book value of IPP owned assets and infrastructure. IPP assets may be held within a larger holding company making the separation of individual assets difficult. Ulupono also proposed a metric to measure Megawatts ("MW") of non-utility generation on the system.[124]

---

[122] Consumer Advocate Statement at 32.
[123] Ulupono Statement at Exhibit A,1.
[124] *Id.*

The Companies currently provides this information on its website.[125] It would be duplicative to report these metrics in the PBR proceeding as well.

4. Grid Investment Efficiency

For the Grid Investment Efficiency outcome, D&O 37507 states that reported metrics should include:

- Total value ($) of deferred and/or avoided investments (e.g., T&D)
- Total cost ($) of NWAs procured

Consistent with the provisions outlined in D&O 37507, the Companies propose the following metrics:

a) Grid Investment Efficiency Proposal – Total cost of NWA

This metric would measure the total cost of NWAs deployed by the utility or acquired through a program or procurement, which are owned or operated by the utility or a third-party. An NWA includes an electricity grid project that uses nontraditional transmission and distribution ("T&D") solutions, such as, but not limited to, grid-scale or distributed generation ("DG"), energy storage, energy efficiency ("EE"), DR, and grid software and controls, to defer or avoid the need for conventional transmission and/or distribution infrastructure investments.

The Commission has explained that it "agrees that procurement of renewable generation and NWAs, at competitive costs, are objectives suitable for performance mechanisms and clarifies that the PBR Framework will allow for continued opportunities to earn rewards for both. Further, opportunities will not be limited to SSMs, but may also include the use of PIMs to incent efficient and cost-effective procurement."[126] Additionally, the Commission has also shown a specific interest in developing a Grid Investment Efficiency metric proposal related to

[125] https://www.hawaiianelectric.com/about-us/power-facts
[126] D&O 37507 at 151.

"Total cost ($) of NWAs procured."[127] Such a metric could inform the development of a PIM or SSM related to acquisition of NWAs.

The cost of NWA technologies deployed by the utility or acquired through a customer program or competitive procurement that defers or avoids a T&D capital investment would be tracked and reported on an annual basis by capital investment and by service territory (O'ahu, Maui County, Hawai'i Island).

b) Grid Investment Efficiency Proposal – Deferred and/or Avoided Capital Investments

This metric would measure total value of deferred and/or avoided T&D capital investments due directly or indirectly to the installation or acquisition of an NWA deployed by the utility or acquired through a customer program or competitive procurement. Such a metric could inform the development for a PIM or SSM related to the deferral or avoidance of T&D capital investment (*i.e.*, grid needs).

The total value of proposed T&D capital investments to satisfy a Grid Need that is deferred or avoided through NWA technologies deployed by the utility or acquired through a customer program or competitive procurement would be tracked and reported on an annual basis by T&D capital investment with a description of the NWA that enabled the deferral, and by service territory (O'ahu, Maui County, Hawai'i Island).

For this outcome, the Consumer Advocate proposed that the Companies be required to report the total dollar value of projects/programs where the Companies seek an NWA solution compared to traditional project or program.[128] This proposal is substantially similar to the Companies' Grid Investment Efficiency proposals and can be easily adopted with one slight

[127] *Id.* at 160.
[128] Consumer Advocate Statement at 38.

modification: "Total cost of NWAs **sought and/or** deployed by the utility or acquired through a program or procurement, which are owned or operated by the utility or a third-party". The Consumer Advocate has also proposed that the Companies report Annual savings from NWA solutions as compared to traditional solutions.[129] If the "annual savings" are estimated on a prospective basis, the Companies' Grid Investment Efficiency proposals should be able to derive the comparison suggested by the Consumer Advocate. For this proposal, the Companies recommend adopting the Companies' Grid Investment Efficiency proposals in favor of the Consumer Advocate's. Lastly, the Consumer Advocate proposed that the Companies track and report Annual savings of NWA solutions as compared to estimated savings from the NWA solutions.[130] Although this proposed metric is feasible to report, it would be more appropriate to consider it as part of reporting requirements for specific applications or projects of an NWA project or contract for services. Therefore, the Companies recommend not adopting this proposal for inclusion in the PBR portfolio of metrics.

Ulupono proposed a metric for the Total value of NWAs contracted for/by the utility (rather than proposed) as compared to the avoided cost of conventional non-NWA solutions on an annual and cumulative basis.[131] The Companies' Grid Investment Efficiency proposals are based on actual contracted or deployed solutions and are in alignment with Ulupono's proposal. The Companies' Grid Investment Efficiency proposals should be able to derive the comparison as suggested by Ulupono. However, it may be appropriate to consider as part of reporting requirements for specific applications or projects of an NWA project. Therefore, the Companies do not recommend adopting this proposal to be included in the PBR portfolio of metrics.

---

[129] *Id.*
[130] *Id.* at 39.
[131] Ulupono Statement at Exhibit A,3 as a DER Asset Effectiveness metric proposal.

5. Resilience

Consistent with the provisions of D&O 37507, the Companies support a reported metric to track emergency response certification for the Resilience outcome. This metric would measure the number of employees completing National Incident Management System ("NIMS") Incident Command System 100, 200, and 300 Certification.

The electric utility industry is moving toward adoption of NIMS as the standard for Emergency Response to better align with FEMA/Federal Response. Hawai'i state and county organizations are familiar with NIMS. Employee certification of NIMS training is a key indicator of resilience and the ability to restore electric service following an emergency.

Data for this metric can be collected annually. Historic information is available from 2017 and can be provided through FEMA certification.

The Consumer Advocate has proposed a number of metrics for this outcome including "percentage of circuits with intelligent reclosers" and "percentage of circuits with automation, remote-control equipment, and/or remote monitoring functionality."[132] The Companies do not support these proposed reported metrics at this time. While it may be feasible to define and quantify the metrics with reasonably available data, more work would need to be done to clearly define these metrics. For example, the type of question that must be addressed includes does having one single-phase recloser on a lateral branch count the same as a 3-phase recloser on the main trunk of a circuit? Furthermore, it is unclear what percentage of circuits with intelligent reclosers is optimal for resilience when weighed against other resilience improvement options – and what is optimal may vary between islands/operating areas. Moreover, is having a fault current indicator on a circuit going to count as a "circuit with remote monitoring functionality"?

[132] Consumer Advocate Statement at 39.

In addition, it is unclear what percentage of circuits with automation, remote-control equipment, and/or remote monitoring functionality is optimal for resilience when weighed against other resilience improvement options – and what is optimal may vary between islands/operating areas.

The Consumer Advocate also proposes the "total amount of time that critical loads are without power in a year" as a metric.[133] The Companies do not support this metric as it is not quantifiable through reasonably available data at this time. This metric may be technically feasible in the future after broader smart meter deployment. In addition, the definition and scope of critical loads would need to be further defined (e.g., multiple tiers of critical loads, or just top tier; which sectors and which specific types of loads within sectors?). Additionally, this is more of a blue-sky and gray-sky reliability metric rather than a resilience metric, which would be more indicative of system performance for severe/black-sky events. There may be many situations where a metric that includes data from blue-sky and gray-sky types of events would give misleading indications of the level of resilience. For example, critical load outages could be due to causes that would not be relevant to performance in severe events (e.g., underground cable faults, motor vehicle accidents, vandalism). Conversely, some circuits serving critical loads may have few outages in a typical year, but may be more vulnerable to hazards typical of severe events (e.g., flying debris, storm surge, extreme wind exceeding design standards).

Ulupono has proposed a metric for "vulnerability assessments of quantified forecasted impacts to poles, wires, generation facilities and related infrastructure, as measured by the estimated loss of load or service due to (i) downed transmission or distributional circuit poles and lines from specified ranges of wind speeds, or (ii) damage to coastal utility infrastructure from a specified range of storm surge."[134] The Companies do not support this reported metric at

[133] *Id.*
[134] Ulupono Statement at Exhibit A,5.

this time because it is not quantifiable through reasonably available data and modeling tools. However, the Companies are looking into damage prediction modeling options to help develop performance-based resilience metrics to forecast impacts of this nature in the future.

Life of the Land has proposed a number of metrics for the Resilience outcome. LOL has proposed "percent of substations and power plants in the Sea Level Rise Exposure Area ([135]SLR-XA) by Island." This can be quantified with reasonably available data. However, this is not a metric that is worth reporting on a regular basis as the location of substations and power plants will not be changing frequently. LOL also proposes percentage of distribution outages on lines with deferred maintenance by Island as a metric. The Companies do not support this metric as the scope and definition of deferred maintenance would need to be determined. Establishing the relationship between deferred maintenance and outages throughout the year may be useful for improving reliability but may not be a good indicator of the level of resilience. LOL also proposes percentage of transmission and sub-transmission outages on lines with deferred maintenance by Island as a metric. The Companies do not support this metric due to the fact that the scope and definition of deferred maintenance would need to be determined. Establishing the relationship between deferred maintenance and outages throughout the year may be useful for improving reliability but may not be a good indicator of the level of resilience. Finally, LOL proposes percentage of Transmission Grid that can be maintained via Live Wire Maintenance by Island as a metric. The Companies disagree with this metric as most transmission circuits can be isolated without causing outages to customers; and Live Wire Maintenance is not relevant to the types of scenarios resilience planning is intended to address.

[135] Life of the Land's Prioritized Performance Incentive Mechanisms and Reported Metrics ("LOL Metrics") at 9.

The Companies respond to the various proposals for metrics offered by the County of Hawaii[136] as follows: The Companies do not support a metric for cumulative customer-hours without power as the Companies already provides this information to the Commission in their service reliability reports. The Companies do not support a metric for cumulative customer-hours that critical services are without power (public services, hospitals, fire, police, military, etc.) for the same reasons discussed above in response to the Consumer Advocate's proposed metric: "The total amount of time that critical loads are without power in a year." The Companies also do not support a metric for economic impact of outages as this proposal is not clearly defined; not quantifiable through reasonably available data; not easily interpreted; and not easily verified. The Companies oppose a metric for avoided outage cost for the same reasons. The Companies do not support a metric for speed and extent to which outages are recovered from both because the proposal needs to be more clearly defined and very important safety risks must be considered and addressed before adopting this type of metric. Moreover, outage duration metrics are already provided to the Commission in service reliability reports (i.e., SAIDI, CAIDI). Similarly, the County of Hawaii's proposal for a metric to track the "ability for the system to respond to rapid shocks as measured by response to disturbances and stabilization of voltage and frequency" also needs to be more clearly defined. Finally, a reported metric for "number of training events and personnel trained, such as simulations and tabletop exercises with stakeholders" is not necessary as the Companies' proposed Resilience "Certificate" would capture the same data.

[136] County of Hawaii's Refined PBR Proposals at 20.

6. DER Asset Effectiveness

D&O 37507 specified that reported metrics for the DER Asset Effectiveness outcome should include the following:[137]

- Percentage and total MW of DER systems capable of providing grid services
- Total MW of capable DER systems enrolled in grid services programs
- Total MW of DER systems enrolled in grid services programs being utilized to provide grid services (e.g., FFR, Load Reduction, Load Build)
- MW of energy curtailed from DERs, including partial curtailment or power reductions

For the outcome of DER Asset Effectiveness, the Companies support the proposed reported metrics identified by the Commission in D&O 37507 as follows:

a) Percentage and total MW of DER systems capable of providing grid services.

The Companies support the tracking of the total MW of "DER systems capable of providing grid services." However, the Companies seek a clear definition and methodology of what specifically shall count as DER systems capable of providing grid services. Advanced inverter settings (IEEE standard compatibility) could be required for systems to be defined as capable of providing grid services, and if advanced inverter settings are required, the Companies would need a set method of how to determine the number of systems with advanced inverter settings for existing program participants as well as for new program participants. The Companies do not have an accurate count of the number of existing DER systems with advanced inverter settings, and a methodology to estimate the total MW capacity would need to be defined. Further, water heaters, electric vehicles, and other resources could potentially be included as part

[137] D&O 37507 at 160.

of the definition of DER systems capable of delivering grid services. However, the Companies are not able to accurately quantify the total capacity of these DER resources. Alternatively, the definition of capable DER systems could be limited to PV-Battery systems.

For an initial metric, the Companies propose setting the total MW of DER systems capable of providing grid services to customers that have a storage system installed. This amount of storage (MW) would be the numerator of the percentage calculation, and the denominator would be the entire population (MW) of all existing and new DER programs.

b) Total MW of capable DER systems enrolled in grid services programs.

The Companies propose that grid services programs be defined to include the contracted grid services through aggregators that have an approved Grid Service Purchase Agreement ("GSPA"), and the successor DER programs (that are currently being developed in the Program Track of the DER Polices proceeding) that include grid services as a requirement.

c) Total MW of DER systems enrolled in grid services programs being utilized to provide grid services (e.g., FFR, Load Reduction, Load Build).

For this metric, the Companies propose two different approaches to measuring utilization: 1) a performance factor calculation which is calculated every month against the number of events performed, multiplied by the total MW of enrolled DER systems, or 2) simply reporting the number of events for each of the grid services to showcase the utilization of the various grid services programs.

d) MW of energy curtailed from DERs, including partial curtailment or power reductions.

For this metric, the Companies will be able to report on curtailed duration and amount (MW) if the participating customer has an advanced meter installed. The Companies intend to

report on curtailment triggered as part of the tariff requirement such as included in the current Customer Grid-Supply Plus DER program, and any successor DER program would include the same curtailment requirement. Curtailment resulting from the delivery of grid services would be reported in the utilization metric (i.e., part (c) above).

C. STREAMLINING OF REPORTING

As noted in D&O 37507 and discussed above, to further avoid duplicative efforts, the Post-D&O Working Group should consider whether specific reports already provided by the Companies in other dockets are suitable to serve as Scorecards or Reported Metrics under the PBR Framework, or whether such reports are no longer necessary and can be replaced.

During the WG Meeting #3, the Companies reported that this effort to streamline the Companies' reporting began on September 18, 2020 with the Companies' response to PUC-HECO-IR-30. It continued with the Companies' submission on February 16, 2021, of a detailed spreadsheet which provided a comprehensive listing of the Companies' various reports submitted across dockets and proceedings in response to orders from different Commissions over time for various purposes. The Companies noted during the WG Meeting #3 that they were continuing their evaluative efforts across process areas. Exhibit H to this Refined Proposal lists, as of the date of this filing, includes the existing reporting that the Companies propose eliminating or consolidating and the reasons therefore. Exhibit I to this Refined Proposal lists, as of the date of this filing, includes the existing reporting which the Companies plan to continue due to their continued relevance and perceived usefulness to consumers of the reports. Exhibit H lists reports which are viewed as outdated, no longer necessary because the need for that particular reporting has been satisfied, are for programs which have been closed for a significant amount of time, or the reporting will be covered by more recently developed and approved reporting requirements,

including Scorecards and Reported Metrics anticipated to be adopted in this proceeding. Exhibit H also lists reporting that is duplicative due to the performance mechanisms being captured in other reports, or which can be consolidated with other existing reports due to similar reporting requirements between reports – thereby providing a more centralized repository of the information accessible to consumers. Finally, the Companies propose certain adjustments to existing reporting requirements to promote standardization or efficiency such as through requiring that reporting of similar metrics be done on an annual basis versus a single report in a group being required quarterly, and other reports only being required when there is something to report on versus reports needing to be submitted even when there is no activity to report. The goal of this effort is to streamline, modernize and make more efficient reporting for PBR and other proceedings.

During the WG Meeting #3, the Companies also discussed how best to ensure that this effort is the most productive and appropriately balances the value of the Companies' reporting to the consumers of the information versus the resource burden that it places upon the Companies. As discussed in the Companies' response to PUC-HECO-IR-30, there are costs to the Companies' reporting and therefore, consistent with the Utility Financial Integrity principle, reporting should not be required of the Companies simply out of curiosity or because it would be nice to have. The reporting that the Companies are required to perform on a going forward basis should have a well-defined and meaningful purpose as well as a proposed timeframe during which the reporting is anticipated to remain relevant so that reporting requirements do not continue far beyond the time when they are useful.

Accordingly, part of the evaluative process should focus on what information is still relevant and useful to the consumers of that information which would include, the Commission,

the Consumer Advocate and stakeholders in this proceeding. Suggestions on what the consumers of the reporting feel may no longer be necessary or useful can be very helpful in this streamlining process. This process can also be better informed by certain principles, such as the ability to report on a particular piece of information once where that is possible, and to eliminate paper filing requirements to the extent that a document is already electronically filed. Along these lines, it was discussed that prior to the issuance of Order No. 37043, which was a response to the circumstances imposed by COVID-19, up to 11 hard copies of each report were printed for filing. The Companies accordingly inquired whether it might be possible to continue those determinations in Order No. 37043 which suspended hard copy filings and required electronic filings for those filings where that is possible and consistent with statute. As a part of that discussion, it was noted that the Commission's DMS is viewed as an impartial governmental repository of official docket filings and the question was posed whether the DMS could be somehow integrated into the streamlining process, noting that there are a number of reports that are available on the DMS that are also posted to the Companies' existing Key Performance Metrics webpage. As a part of this discussion, it was noted that for the consolidated webpage requested in D&O 37507, that webpage may be less user friendly to the extent that every possible report, including those already reported elsewhere, needs to be incorporated into the single less focused webpage. The Companies look forward to a continued dialogue with the Commission and parties to further streamline and make more efficient the Companies' reporting, both existing and to come.

IV. CONCLUSION

The Companies look forward to timely implementation of the Commission's determinations with regard to the Prioritized Performance Mechanisms and to continuing to

collaborate with the Commission, Commission Staff and the stakeholders to further evaluate and improve upon the proposals adopted by the Commission during the remainder of the multi-year rate plan.

DATED: Honolulu, Hawai‘i, April 9, 2021.

/s/ Rod S. Aoki
PETER Y. KIKUTA
ROD S. AOKI

Attorneys for
HAWAIIAN ELECTRIC COMPANY, INC.
HAWAI‘I ELECTRIC LIGHT COMPANY, INC.
MAUI ELECTRIC COMPANY, LIMITED

Exhibit A
Hawaiian Electric Companies LMI/EE PIM
Illustrative Example of LMI EE PIM Calculation: Metric 1 - Energy Savings

Illustrative Total Metric 1 Award Over Three Years:	**$654,601**

Illustrative Example of LMI EE PIM Calculation: Metric 1 - Energy Savings

Table 1: Hawaiian Electric Companies PIM Calendar Year

LMI/EE PIM Duration

Hawaiian Electric Companies PIM Calendar Year		**CY 2021**		**CY 2022**		**CY 2023**		**3 year**
		H1	**H2**	**H1**	**H2**	**H1**	**H2**	**TOTAL**
Metric 1 Residential Benchmark (Based on HI Energy kWh Target)	kWh		840,950		840,950		840,950	
Metric 1 Business Benchmark (Based on HI Energy kWh Target)	kWh		10,580,293		10,580,293		10,580,293	
Realized Energy Savings Res Sectors beyond HI Energy Target PIM Benchmark	kWh		25,000		50,000		100,000	175,000
Realized Energy Savings Bus Sectors beyond HI Energy Target PIM Benchmark	kWh		100,000		150,000		200,000	450,000
Metric 1 Award for Residential	$		63,881		131,594		271,084	466,559
Metric 1 Award for Business	$		40,294		62,254		85,495	188,043
Total Metric 1 Award	$		$ 104,174		$ 193,848		$ 356,579	$ 654,601

Hawaii Energy's Program 2021 begins calendar year July 1, 2021

Table 2: Hawaii Energy Program Year

Hawaii Energy Program Year[1]		**PY 2021**		**PY2022**		**PY 2023**	
		H1	**H2**	**H1**	**H2**	**H1**	**H2**
HI Energy's Res HTR 1st Year Incentive Budget[2,3]	$		$ 2,148,818		n/a		n/a
HI Energy's Bus HTR 1st Year Incentive Budget[2,3]	$		$ 4,263,190		n/a		n/a
Total A&A 1st Incentive Budget	$		$ 6,412,008				
HI Energy's Res HTR 1st Year Energy Savings Target[2,3]	kWh		840,950		n/a		n/a
HI Energy's Bus HTR 1st Year Energy Savings Target[2,3]	kWh		10,580,293		n/a		n/a
Total A&A 1st Year Target Energy Savings	kWh		11,421,243				
HI Energy's Res HTR Incentive Budget $ per kWh	$/kWh		2.56		2.63		2.71
HI Energy's Bus HTR Incentive Budget $ per kWh	$/kWh		0.40		0.42		0.43

Notes:
(1) Hawaii Energy's Program Year runs from July 1st through June 31st of the following year. e.g. PY 2021 runs from July 1st CY 2021 through June 31st CY 2022.
(2) HE Triennial Plan 2019-2021, Appendix C, pdf-pg. 126. The target approved for Program Year 2021 will be used as the benchmark for the 3 year duration of the PIM
(3) The first year of the PIM is based on the the approved $/kWh for Hawaii Energy's Program Year 2021. For the second and third year of the PIM, a 3% escalation rate is applied to serve as a proxy for a typical inflation rate.

Exhibit B
Hawaiian Electric Companies LMI/EE PIM
Illustrative Example of LMI EE PIM Calculation: Metric 2 - PARTICIPATION

Illustrative Total Metric 2 Award Over Three Years:	**$386,727**

ILLUSTRATIVE EXAMPLE OF LMI EE PIM CALCULATION: METRIC 2 - PARTICIPATION

Table 1: Hawaiian Electric Companies PIM Calendar Year

Hawaiian Electric Companies PIM Calendar Year		LMI/EE PIM Duration						
		CY 2021		**CY 2022**		**CY 2023**		**3 year**
		H1	**H2**	**H1**	**H2**	**H1**	**H2**	**TOTAL**
Metric 2 Residential Benchmark (Based on HI Participation Target)	par		9,000		9,000		9,000	
Metric 2 Business Benchmark (Based on HI Participation Target)	par		60		60		60	
Realized Participation Res & Bus Sectors beyond HI Energy Target	par		900		900		900	2,700
Realized Participation Res & Bus Sectors beyond HI Energy Target	par		10		10		10	30
Metric 2 Award for Residential	$		96,697		99,598		102,586	
Metric 2 Award for Business	$		28,421		29,274		30,152	
Metric 2 Award	$		125,118		128,872		132,738	386,727

Hawaii Energy's Program 2021 begins calendar year July 1, 2021

Table 2: Hawaii Energy Program Year

Hawaii Energy Program Year[2]		**PY 2021**		**PY2022**		**PY 2023**	
		H1	**H2**	**H1**	**H2**	**H1**	**H2**
HI Energy's Res HTR 1st Year Incentive Budget[3]	$		2,148,818		n/a		n/a
HI Energy's Bus HTR 1st Year Incentive Budget[3]	$		4,263,190		n/a		n/a
Total A&A 1st Incentive Budget	$		6,412,008				
HI Energy's Res HTR Participation Target[4]	par		20,000		20,000		20,000
HI Energy's Bus HTR Participation Target[4]	par		1,500		1,500		1,500
Total A&A Participation Target	par		21,500		21,500		21,500
HI Energy's Residential Budget $ per Participant[5]	$/par		107		111		114
HI Energy's Business Incentive Budget $ per Participant[5]	$/par		2,842		2,927		3,015

Notes

(1) Metric is set at a target award to calculate kWh target. Companies propose realized Metric 2 award may exceed target but is capped at $2M for both metrics.

(2) Hawaii Energy's Program Year runs from July 1st through June 31st of the following year. e.g. PY 2021 runs from July 1st CY 2021 through June 31st CY 2022

(3) HE Triennial Plan 2019-2021, Appendix C, pdf-pg. 126

(4) Shaded inputs indicate proxy values that need to be updated with Hawaii Energy.

(5) Based on proxy values that need to be verified with Hawaii Energy. The first year of the PIM is based on the the approved $/participant for Hawaii Energy's Program Year 2021. For the second and third year of the PIM, a 3% escalation rate is applied to serve as a proxy for a typical inflation rate.

{Illustrative Example}

LMI/EE PIM
Status Report

The Hawaiian Electric & Hawaii Energy Framework[1] defines three requisite elements to address for all collaboration initiatives. Both Hawaii Energy and Hawaiian Electric will ensure that the three elements in this section appear as the minimal agenda items in all collaboration discussions and essential to any reporting.

The three elements are:

- Program Conceptualization & Development
- Marketing & Customer Experience
- Data Definition & Exchange

Program Conceptualization & Development

{This section will provide updates on the collaboration initiatives for the A&A and LMI programs that will be included in the LMI/EE PIM assessment. It will report on relevant programs offered directly by the Companies to targeted customers which is Requirement 1 in Commission's recommended reporting requirements.}

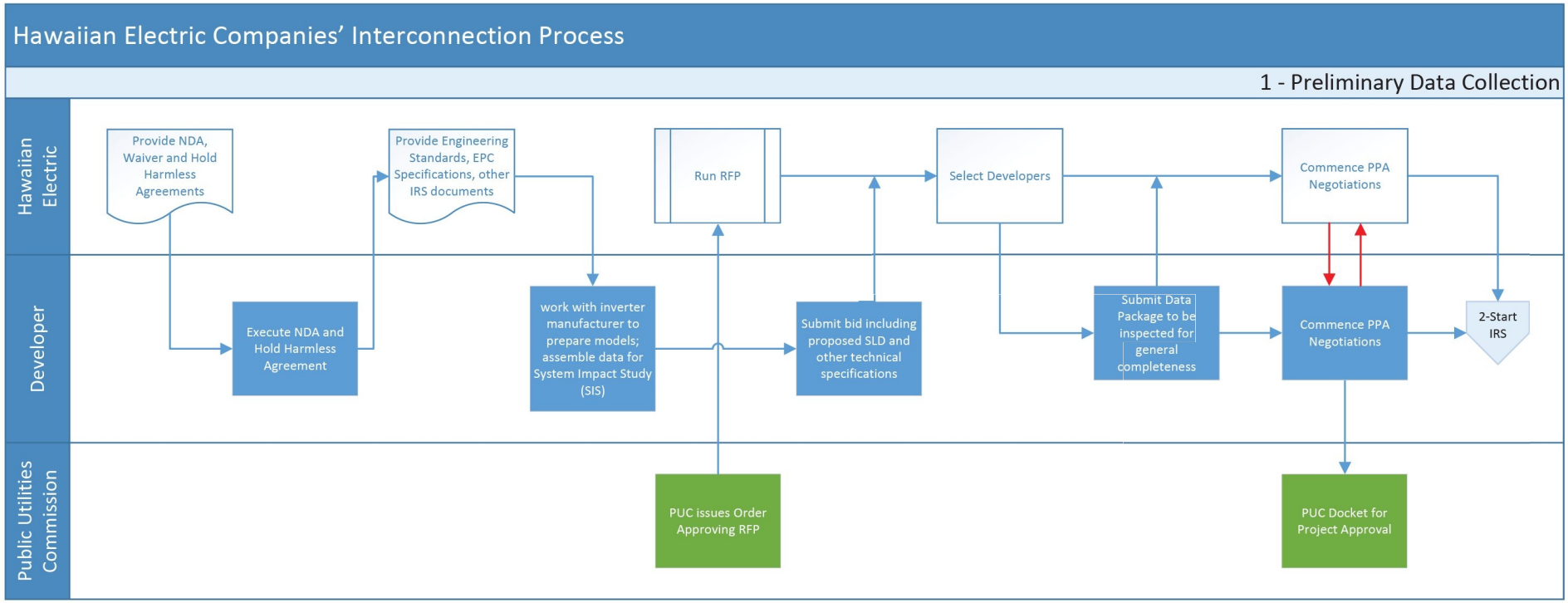
Marketing & Customer Experience

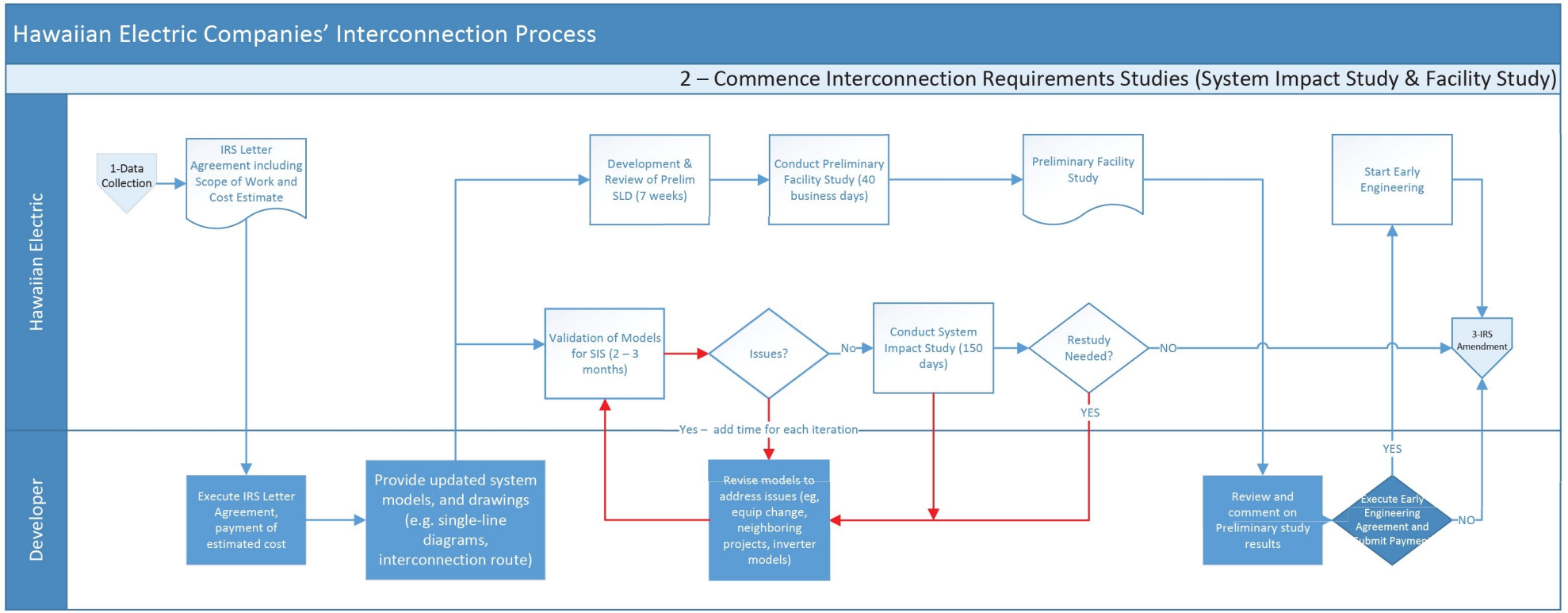
{This section will provide updates on both Hawaii Energy and Hawaiian Electric outreach efforts to customers. Understanding how this will happen and developing collaborative and complementary strategies to do so will not only lend itself to cost efficiencies but will also go a long way to minimize customer confusion. It will report on efforts taken by the Companies to promote Hawaii Energy programming to targeted customers which is Requirement 2 in Commission's recommended reporting requirement.}

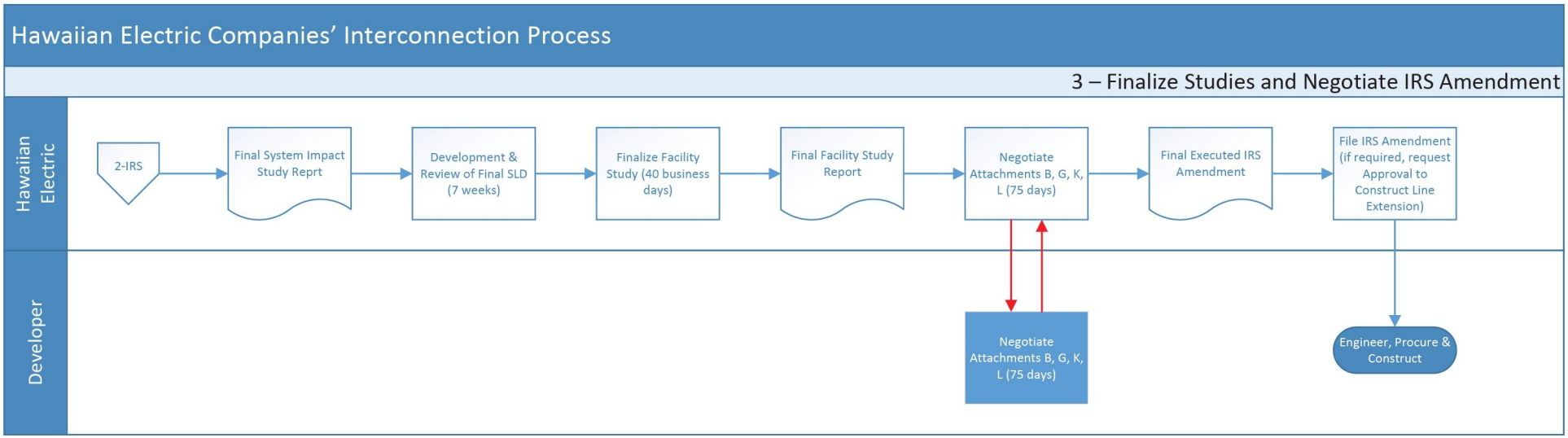
Data Definition & Exchange

{This section will provide updates on both Hawaii Energy and Hawaiian Electric's data exchange efforts. While there are current practices and channels in place for data sharing, data types will need to expand, and data sharing will need to extend to bidirectional data sharing. It will report on data sharing efforts between the Companies and Hawaii Energy, including data provided by both entities and data requested by each entity that was not provided, including an explanation of why the data was not provided which is Requirement 5 in Commission's recommended reporting requirement.}

[1] A filed copy of the Hawaiian Electric & Hawaii Energy's Collaboration Framework was included in, "Response to Order # 36708," filed December 31, 2019 in Docket No. 2007-0323 at 81. Note that this is a live document and continues to evolve to support the Hawaiian Electric & Hawaii Energy Collaboration efforts.


Hawaiian Electric Companies' Interconnection Process
1 - Preliminary Data Collection
Hawaiian Electric
Developer
Public Utilities Commission
Provide NDA, Waiver and Hold Harmless Agreements
Provide Engineering Standards, EPC Specifications, other IRS documents
Run RFP
Select Developers
Commence PPA Negotiations
Execute NDA and Hold Harmless Agreement
work with inverter manufacturer to prepare models; assemble data for System Impact Study (SIS)
Submit bid including proposed SLD and other technical specifications
Submit Data Package to be inspected for general completeness
Commence PPA Negotiations
2-Start IRS
PUC issues Order Approving RFP
PUC Docket for Project Approval


Hawaiian Electric Companies' Interconnection Process
2 – Commence Interconnection Requirements Studies (System Impact Study & Facility Study)
Hawaiian Electric
Developer
1-Data Collection
IRS Letter Agreement including Scope of Work and Cost Estimate
Development & Review of Prelim SLD (7 weeks)
Conduct Preliminary Facility Study (40 business days)
Preliminary Facility Study
Start Early Engineering
Validation of Models for SIS (2 – 3 months)
Issues?
No
Conduct System Impact Study (150 days)
Restudy Needed?
NO
3-IRS Amendment
YES
Yes – add time for each iteration
Execute IRS Letter Agreement, payment of estimated cost
Provide updated system models, and drawings (e.g. single-line diagrams, interconnection route)
Revise models to address issues (eg, equip change, neighboring projects, inverter models)
Review and comment on Preliminary study results
Execute Early Engineering Agreement and Submit Payment
YES
NO


Hawaiian Electric Companies' Interconnection Process
3 – Finalize Studies and Negotiate IRS Amendment
Hawaiian Electric
Developer
2-IRS
Final System Impact Study Reprt
Development & Review of Final SLD (7 weeks)
Finalize Facility Study (40 business days)
Final Facility Study Report
Negotiate Attachments B, G, K, L (75 days)
Final Executed IRS Amendment
File IRS Amendment (if required, request Approval to Construct Line Extension)
Negotiate Attachments B, G, K, L (75 days)
Engineer, Procure & Construct

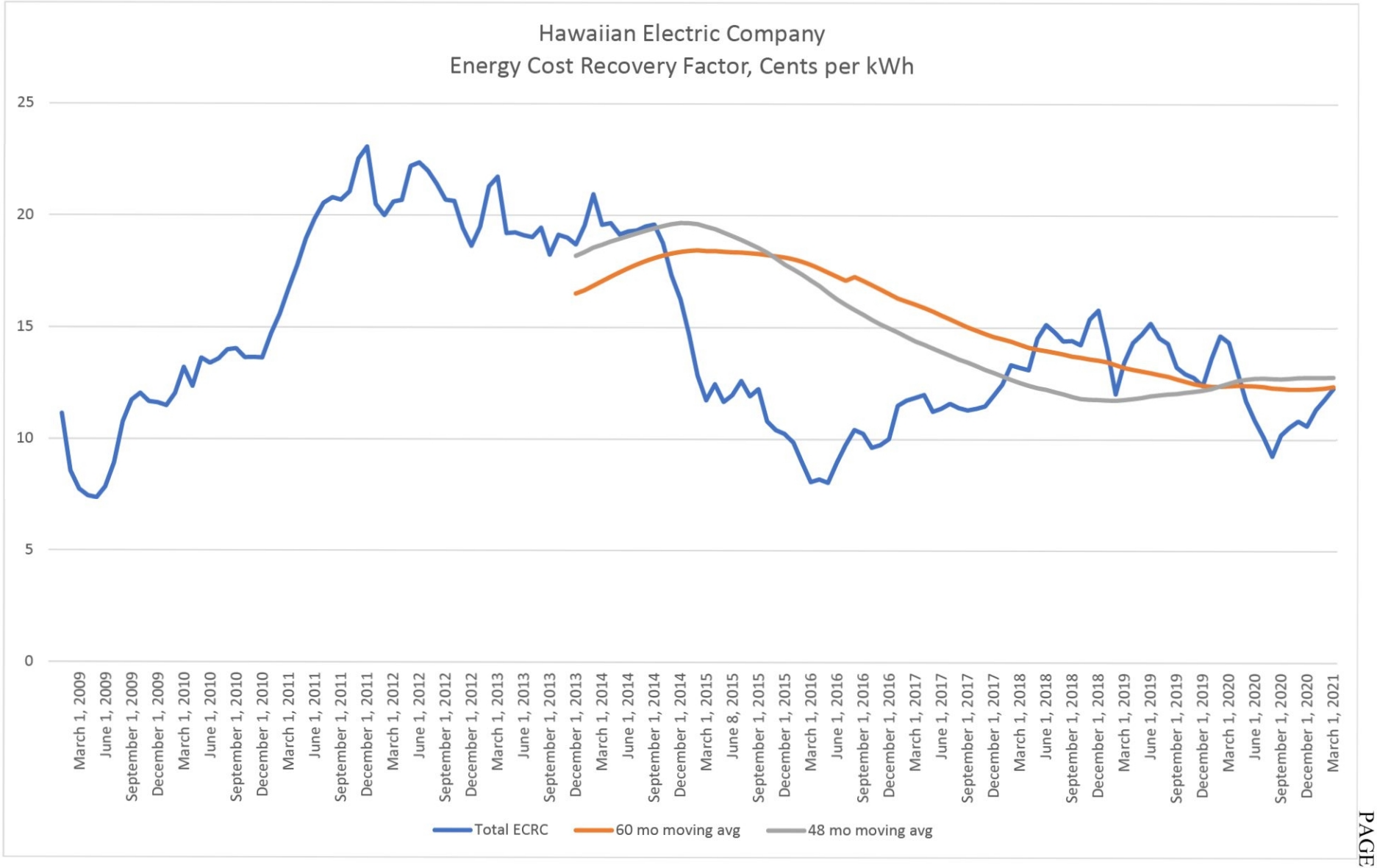


EXHIBIT E
PAGE 1 OF 1

Hawaiian Electric Companies
Absolute Emissions Scorecard

Year	Target (% reduction from 2010)	Target (Metric Tons CO_2e)	Performance (Metric Tons CO_2e)
2010	N/A	N/A	7,755,297
2011	N/A	N/A	7,862,871
2012	N/A	N/A	7,565,234
2013	N/A	N/A	7,273,517
2014	N/A	N/A	7,176,676
2015	N/A	N/A	6,719,543
2016	N/A	N/A	6,694,106
2017	N/A	N/A	6,535,339
2018	N/A	N/A	6,593,921
2019	N/A	N/A	6,764,430
2020*	**16.0%**	6,514,449	6,081,324
2021	17.2%	6,421,386	
2022	18.4%	6,328,322	
2023	19.6%	6,235,259	
2024	20.8%	6,142,195	
2025	22.0%	6,049,132	
2026	23.2%	5,956,068	
2027	24.4%	5,863,005	
2028	25.6%	5,769,941	
2029	26.8%	5,676,877	
2030	**28.0%**	5,583,814	
2031	31.6%	5,304,623	
2032	35.2%	5,025,432	
2033	38.8%	4,746,242	
2034	42.4%	4,467,051	
2035	46.0%	4,187,860	
2036	49.6%	3,908,670	
2037	53.2%	3,629,479	
2038	56.8%	3,350,288	
2039	60.4%	3,071,098	
2040	**64.0%**	2,791,907	
2041	71.2%	2,233,526	
2042	78.4%	1,675,144	
2043	85.6%	1,116,763	
2044	92.8%	558,381	
2045	**100.0%**	0	

*2020 represents preliminary data.

Hawaiian Electric Companies
Emissions Intensity Scorecard

Year	Target (% reduction from 2010)	Target (g/kWh)	Performance (g/kWh)
2010	N/A	N/A	763
2011	N/A	N/A	777
2012	N/A	N/A	766
2013	N/A	N/A	735
2014	N/A	N/A	721
2015	N/A	N/A	667
2016	N/A	N/A	665
2017	N/A	N/A	654
2018	N/A	N/A	656
2019	N/A	N/A	653
2020*	**16.0%**	641	587
2021	17.2%	632	
2022	18.4%	623	
2023	19.6%	613	
2024	20.8%	604	
2025	22.0%	595	
2026	23.2%	586	
2027	24.4%	577	
2028	25.6%	568	
2029	26.8%	559	
2030	**28.0%**	549	
2031	31.6%	522	
2032	35.2%	494	
2033	38.8%	467	
2034	42.4%	439	
2035	46.0%	412	
2036	49.6%	385	
2037	53.2%	357	
2038	56.8%	330	
2039	60.4%	302	
2040	**64.0%**	275	
2041	71.2%	220	
2042	78.4%	165	
2043	85.6%	110	
2044	92.8%	55	
2045	**100.0%**	0	

*2020 represents preliminary data.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Cost Control					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
PUC	**D&O**	**Not identified as a priority metric by PUC.**			
CA	32	Average rate base dollars per customer.	Yes	No	Appropriate benchmarks or baselines would be needed for this metric to be useful.
CA	32	Average non-fuel O&M per customer.	Yes	No	Appropriate benchmarks or baselines would be needed for this metric to be useful. O&M should consider exclusions for spend that is mandated by third parties or outside the control of the companies.
UI	Exh A, 2	Rate of annual growth for overall authorized revenues compared to inflation.	Yes	No	A number of factors may impact this metric and may make any meaningful conclusions difficult. Appropriate benchmarks or baselines would be needed for this metric to be useful.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Customer Engagement					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
PUC	**D&O**	**Not identified as a priority metric by PUC.**			
CA	33	Third-party survey. The Consumer Advocate has been supporting this throughout the proceeding and continues to do so. A third-party survey to assess customer satisfaction can be a powerful tool to not only assess other possible areas that need further attention with respect to unacceptable areas of performance but it can also be a tool to help demonstrate customer engagement with respect to trying to better understand customer needs.	Yes	No	Content in Escalent's Residential Customer Satisfaction Benchmark is tracked on a quarterly basis. This research cannot be released publicly in its entirety since it provides our company a competitive advantage for strategic planning through its statistical model. Individual metrics can be considered if they're proposed and clearly defined.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Customer Engagement					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
CA	33	Number and percent of customers NOT participating in utility programs.	No	No	It is the Companies' position that a metric that tracks the number and percentage of customers that do not participate in utility programs is of questionable value since, as the Consumer Advocate acknowledges, there may be customers that are only interested in basic service (and are therefore unreceptive to customer outreach), nor would benefit from each program and tariff. See Consumer Advocate Statement at 34, filed on March 16, 2021. As such, the metric would not be a fair reflection of the Companies' outreach and engagement efforts.
CA	34	Number and percent of customers NOT participating in a Hawaii Energy efficiency program.	No	No	Hawaii Energy counts participation in its programs, and the Companies are unaware if they count the opposite (non-participants), so may be difficult to track and monitor.
UI	Exh A, 2	The number of customers participating in each type of energy program.	Yes	No	As stated, this metric would count overlapping customers therefore skewing the results.
UI	Exh A, 2	Acceptance rate of applicants to each of the programs.	Yes	No	The Companies do not deny applications, unless the programs are subject to program caps, such as the capacity cap on the CGS+, and as such, the acceptance rate would not be meaningful.
COH	17	Number of customers who have accessed the web-based energy management tool (AMI).	Yes	Yes	The Companies can track the number of customers who access the Energy Portal.
COH	17	Number of accounts that have enrolled in the web-based energy management tool.	Yes	Yes	Customers who enroll in UCES will automatically have access to the Energy Portal, and so the Companies can track the number of customers registered for UCES.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Customer Engagement					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
COH	17	Number of accounts that downloaded or were sent a Usage Report via the automated Web tool.	Not currently	No	If the usage report is related to the Green Button download data, the Companies are currently working with the vendor to implement tracking for this and hope to have this capability after post go-live April 2021.
COH	17	Average time spent on the web-based management tool per residential customer.	No	No	The Companies are unable to track by residential and business customer. Currently, the analytics treat the residential and business customers the same and cannot be broken out without additional updates to our existing tracking mechanisms.
COH	17	Average time spent on the web-based management tool per business customer.	No	No	The Companies are unable to track by residential and business customer. Currently, the analytics treat the residential and business customers the same and cannot be broken out without additional updates to our existing tracking mechanisms.
COH	17	Number of Web based management tool logins.	Yes	Yes	The Companies can track the number of customers who access the Energy Portal.
COH	17	Number of customers eligible for AMI programs/ rebate/ tariff.	No	No	Unclear what AMI programs/rebate/tariff refer to. If referring to rate programs enabled by AMI, those would be more appropriately tracked under ARD.
COH	17	Number of critical pricing/load management events.	No	No	Critical pricing programs are not yet developed but if they are, should be tracked under ARD. Load management events are already tracked under existing DR programs.
COH	17	Number of Customers who received a DSM/DP rebate or other program rebate as a direct result of AMI program benefits.	Maybe	No	Companies would be able to provide the number of customers who received DSM/DR rebates, however it is unclear what is meant by "as a direct result of AMI program benefits."
COH	17	Average utility paid customer AMI program rebate.	No	No	Unclear what is meant by an AMI program rebate.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Customer Engagement					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
COH	17	Demand and energy reduction during critical pricing event.	No	No	Critical pricing programs are not yet developed but if they are, should be tracked under ARD.
COH	17	Number of Home Energy Reports mailed out with incremental data.	Yes	No	Home Energy Reports and the customers selected to receive these reports are managed by Hawaii Energy, and the data should be provided by Hawaii Energy.
COH	17	Percent of load over time that is reduced voluntarily by customers receiving Home Energy Reports.	Maybe	No	Home Energy Reports and the customers selected to receive these reports are managed by Hawaii Energy, and the data should be provided by Hawaii Energy.
COH	26	Number of accounts sent Load or Pricing Alert Notifications as a result of AMI.	Maybe	No	Unclear what is meant by load or pricing alert notifications "as a result of AMI." Companies are able to track certain load notifications in connection with the Companies' DR programs. If referring to rate programs enabled by AMI, those would be more appropriately tracked under ARD.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Electrification of Transportation					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
PUC	**D&O**	**Not identified as a priority metric by PUC.**			
CA	38	Total kWh delivered at smart charging rates at charging stations measurable by the Companies.	Yes	No	Assuming "smart charging rates" cover all of the current and proposed EV rates, then this is included as part of the Companies' scorecard proposal.
UI	Exh A, 3	Metered kWh produced at Electric Vehicle ("EV") charging stations enrolled in existing EV tariffs (EV-U, EV-Maui, EV-F, EV-BUS, EV-J and EV-P).	Yes	No	This is included as part of the Companies' scorecard proposal.
UI	Exh A, 3	Metered kWh to EVs plus total estimated kWh to EVs.	Yes	No	This is included as part of the Companies' scorecard proposal.
UI	Exh A, 4	Estimated GHG avoidance from EVs based on average Internal Combustion Engine Vehicle ("ICE-V") efficiency.	No	No	The proposed formula only represents GHGs avoided by not using fossil-fueled vehicles. It does not factor in the GHGs emitted to produce the electricity used to charge the EVs. The Companies also report on GHG in their filings and reports and would like consistency in methodology to mitigate against confusion and also reduce costs. Each GHG study can cost tens of thousands of dollars.
COH	18	Customer education on benefits and cost of ownership for EVs and electric fleets.	No	No	It is unclear what would be measured and reported.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Electrification of Transportation					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
COH	18	Value of utility demand charge offsets for public chargers (reduced over time as market becomes more competitive).	No	No	It is unclear what would be measured and reported.
COH	18	Innovative EV TOU rates.	No	No	It is unclear what would be measured and reported. The Companies provides numerous EV TOU rates available and continue to look for innovate offerings.
COH	18	Managed charging programs/incentives.	No	No	It is unclear what would be measured and reported. The Companies provides numerous EV TOU rates available and continue to look for innovate offerings to incentive managed charging.
COH	18	Shared Fueling Hubs for Ride Share Only (with stored energy capabilities).	No	No	It is unclear what would be measured and reported.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

GHG					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
PUC	**D&O**	**Not identified as a priority metric by PUC.**			
COH	19	Point source: GHG intensity= lbs CO_2 (a unit)/MWh_e (a unit)	Yes	No	This metric does not appear to add much value since it is essentially a measurement of individual unit efficiency and not a good indication of progress towards decarbonization. For example, as more renewables are added to the system, carbon emitting resources will operate at lower loads and therefore less efficiently. The unit GHG intensity will increase while accommodating a lower system GHG intensity.
COH	19	Centralized generation: GHG intensity= lbs CO_2 (fleet)/MWh_e (fleet)	Yes	No	If properly interpreted, this metric could provide some insight to the contribution of centralized resources versus distributed resources. However, it could also create confusion and misinterpretation, especially if a metric tied to all generation is being reported. Therefore, Hawaiian Electric does not support reporting of this metric assuming a metric tied to all generation is reported.
COH	19	All generation and loads: GHG intensity= lbs CO_2 (grid)/MWh_e (grid)	Yes	Yes	This calculation is in line with what is being proposed as a scorecard by the Hawaiian Electric Companies. "Distributed assets connected to HECO Grid" needs to be further defined to ensure the data needed to calculate this metric is available to the Hawaiian Electric Companies.
COH	27	Note: If only one metric is selected by Commission, GHG intensity should be conceptualized as the emissions from the full electrical system, including all generation and all loads.	Yes	Yes	The Hawaiian Electric Companies agree and have proposed a GHG emission intensity scorecard based on total MWh generated as reported for the RPS-A PIM.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

GHG					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
LOL	6	Total kWh delivered to EVs by Vehicle Type by Island.	No	No	This data is not available to the Companies, and would not be able to obtain this type of data from customers.
LOL	6	Total number of EVs by Vehicle Type by Island.	No	No	This data is not available to the Companies, and would not be able to obtain this type of data from customers.
LOL	6	eV Miles Driven by Vehicle Type by Island.	No	No	This data is not available to the Companies, and would not be able to obtain this type of data from customers.
LOL	6	GHG Reduction Due to EoT.	No	No	This metric is not well defined. It is unclear if LOL is proposing that the Companies report GHG reductions due to EoT for the State or for the Company.
LOL	6	Average upstream (production, transportation, refining) GHG emissions by fossil fuel type (MTCO2e).	Yes	No	Previous GHG analyses provided in other dockets provide information about upstream GHG emissions associated with fuel oil, which will be the only fossil fuel used to serve Hawaiian Electric customers following the retirement of the AES coal plant in 2022.
LOL	6	Number of multi-unit buildings that switch between gas and electric.	No	No	The metric is unclear. To the extent that the metric is related to customers using gas for appliances, the Companies do not have this information.

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Interconnection Experience					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
PUC	**D&O**	**Not identified as a priority metric by PUC.**			
UI	Exh A, 4	Average length of time required for completion of 1-5 MW, 6-10 MW and greater than 10 MW utility scale project Interconnection Requirement Studies.	Yes	No	Tiered tracking by project size is a good start, but tracking projects by interconnection voltage may be more meaningful because the interconnection requirements generally increase in complexity as voltage increases. Interconnecting at the distribution voltage is typically simpler (scope, cost, and schedule) than connecting at the higher transmission voltages. While smaller projects generally connect at the distribution voltage, size does not always determine the interconnection voltage. Location, grid conditions, and project attributes are also considered when determining the point of interconnection. The Companies' proposed interconnection experience scorecard will track time attributable to Company by interconnection voltage (distribution, sub-transmission, transmission) vs. other parties' proposal to use project size.
UI	Exh A, 4	Average cost of interconnection for 1-5 MW, 6-10 MW and greater than 10 MW utility scale solar + storage projects.	Yes	No	Tiered tracking by project size is a good start, but tracking projects by interconnection voltage may be more meaningful because the interconnection requirements generally increase in complexity as voltage increases. Interconnecting at the distribution voltage is typically simpler (scope, cost, and schedule) than connecting at the higher transmission voltages. While smaller projects generally connect at the distribution voltage, size does not always determine the interconnection voltage. Location, grid conditions, and project attributes are also considered when determining the point of interconnection. The Companies' proposed interconnection experience scorecard will track interconnection costs by interconnection voltage (distribution, sub-transmission, transmission) vs. other parties' proposal to use project size.
UI	Exh A, 4	The number of times the cost of interconnection has exceeded the	Yes	No	This metric can be determined by the Hawaiian Electric Companies' proposed interconnection experience scorecard to track cost to connect to the network. Further definition will be required to track the cause of costs

Hawaiian Electric Companies
Responses to Parties' Proposed Metrics for Outcomes that Were Not Specifically Requested in D&O 37507

Interconnection Experience					
Party	Page	Description of Metric	Is Metric Feasible?	Is Metric worth including in Final Portfolio of Reported Metrics?	Comments
		estimated cost of interconnection for utility scale IPP projects.			exceeding the estimate. For example, design changes or schedule delays by the IPP, or factors out of the control of the Company should not result in the Company being penalized.
LOL	4	The # of delays, the percent of delays caused by the three major types (IPP opts for different technology, IPP required by utility to use different technology, IPP seeking to satisfy community concern), and the average length of delay by type.	No	No	Attribution of the cause of delay could be subjective. IPP projects are procured through an RFP; Acceptable technology, performance/technical requirements and community engagement expectations are set forth in the RFP; the IPP is aware of these requirements before it submits a project proposal. If a developer proposes changes after the PPA has been executed any delays related to the changes should be attributable to the developer.
LOL	4	The number of projects requiring discretionary land use permits issued by the Land Use Commission or the Board of Land and Natural Resources.	Yes	No	Effect on schedule that permits have is not able to be fully evaluated by the Company prior to bid selection. The number or type of permits that a given project needs is not necessarily determinative of a project's likelihood of success or a dispositive reflection of other value the project can bring to customers. Project location determines what permits are required, the IPP controls where/which permits are required. The number of projects requiring discretionary land use permits should not be a metric to measure the Company's performance.
LOL	4	The number of proceedings where HECO overly uses confidentiality to delay proceedings.	No	No	This metric 1) requires a subjective determination, as opposed to an objective determination based on numbers, and thus is not accurately measurable or appropriate, and 2) it is extremely inefficient because it would arguably require the Commission and parties to litigate every confidentiality designation.

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
04-0268	For Approval to Defer Certain Computer Software Development Costs For Item P0000571, Customer Information System, to Accumulate an Allowance for Funds Used During Construction During the Deferral Period, to Amortize the Deferred Costs, and to Include the Unamortized Deferred Costs in Rate Base	Annual Report of CIS Performance Measures	Customer Information System performance measures 1. Same Day Billing 2. Bills per Billing Representative 3. Bills per Customer 4. Credit Arrangements 5. Billing Accuracy	Annually	In accordance with Decision and Order No. 21798 issued on May 3, 2005 in Docket No. 04-0268, the Companies are required to submit their Annual Report of CIS Performance Measures ("Annual CIS Report") by January 31st of each calendar year. This report requires the following five (5) performance measures: Same Day Billing, Bills per Billing Representative, Bills per Customer, Credit Arrangements, and Billing Accuracy. The Companies believe that since CIS commercial operations began on May 29, 2012 , the system has stabilized evidenced by the Companies' consistent and good performance reflected in their Annual CIS Report filed each year and therefore has satisfied the initial need for this reporting and proposes to eliminate this requirement. Eliminating this report will also contribute to streamlining the Companies' overall reporting requirements by removing duplication of reporting requests. The reporting requirement for Credit Arrangements are also reported in the Companies' COVID-19 Monthly Reports and Billing Accuracy is also being reported on the Key Performance Metrics Website.	Customer Service
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• Renewable Energy - RPS, System RE, Total RE, Amount of Renewable Generation Curtailment, Amount of Renewable Generation Curtailment by Category, Number of NEM Program Participants and Capacity of NEM Program, Amount of Energy Exported by NEM Program Participants	Quarterly	The Companies propose to discontinue reporting on the number of NEM program participants, capacity of the NEM program, and the amount of energy exported by NEM program participants on the Key Performance Metrics website. The NEM program has been closed for over 5 years and the Customer Engagement Scorecard (or metrics) will cover customer participation and retention in DER programs which will include NEM customers. The Companies also propose to discontinue reporting on RPS, System RE, Total RE, Amount of Renewable Generation, Amount of Renewable Generation by Category on the Key Performance Metrics website. Such reporting will be duplicative with PIM reporting for RPS-A. The current reporting could be combined and/or modified to be included with the renewable energy metric reporting that will be done for RPS-A. The Companies also note that annual status reports on RPS are filed in Docket No. 2007-0008.	DER, RPS
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Other Resources and Emerging Technologies** - Demand Response Cumulative Customer Load and # of Events of the DR Programs, Demand Response Duration of Events, Energy Storage Total Amount of Power	Quarterly	The Companies propose to discontinue reporting on Demand Response and Energy Storage on the Key Performance Metrics website, as reporting is anticipated to be replaced with DER Asset Effectiveness Metrics (e.g., MWs of DER capable of providing grid services, and MWs of DER utilized to provide grid services), and the Customer Engagement Scorecard (or metrics).	DER

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
02-0051	Interconnection Standards	Rule 14H Status Report	D&O 20056: "3. Unless ordered otherwise, the utilities shall continue to submit to the commission and Consumer Advocate the quarterly and annual reports set forth in section III of Decision and Order. No. 19773." D&O 19773: "2. HECO, HELCO, and MECO shall submit to the commission and Consumer Advocate the quarterly and annual reports set forth in section III, above." D&O 19773 Section III: "3. By December 31, 2002, and by the end of December of each year thereafter, an annual report detailing the time required for each customer to complete each of the six steps set forth in the interconnection process, as identified in Appendix III, section 1(c).8. Also, detailing for each application or request the utility receives, the: (A) customer's name and location; (B) start and end date of the interconnection process;(C) size and type of the distributed generation unit; (D) identification of any additional technical studies required, including the factors and criteria that caused the need for the additional studies, and the cost of the additional studies; and (E) identification of the additional protective equipment required, including the cost of the additional equipment, to the extent this information is available to the utility.	Annually	The Companies propose to discontinue this report as duplicative with the Interconnection PIM. In addition, the customer engagement scorecard will cover customer participation and retention for DER programs.	DER
05-0037	To Modify its Rule 18, Net Energy Metering, and to Make Corresponding Changes to its Rule 14H. Transmittal No. 05-01.	Net Energy Metering Annual Report	3. The Utilities shall file an annual report with the commission and Consumer Advocate, on qualifying facilities greater than 10 kW and less than or equal to 50 kW, which include the following information: A. The status of establishing an agreement with each existing customer, until such time that all such agreements have been finalized and executed; B. A description of all disputes: (i) with a running summary of the factors that have been a basis for the disputes; and (ii) the time needed, from start to finish, to resolve each dispute, along with the time spent on each stage of the dispute resolution process. C. A description of the time required for each customer to complete each of the six (6) steps set forth in the interconnection process, as set forth in Appendix III, Section l(c) . D. For receives: (i) each application or request the Utility customer's name and location; (ii) start and end date of the interconnection process; (iii) size and type of the generation unit; (iv) identification of any additional technical studies required, including the factors and criteria that caused the need for the additional studies; and (v) identification of the additional protective equipment required, including the cost of the additional equipment, to the extent this information is available to the Utility. The annual report shall cover the calendar year period up to and including December 31, and shall be filed by the respective Utilities by January 31 of the following year, with the first annual report due by January 31, 2006.	Annually	The Companies propose to discontinue this report as the NEM program has been closed for over 5 years and new customers are not being added. In addition, the Customer Engagement Scorecard (or metrics) will cover customer participation and retention in DER programs which will include NEM customers.	DER
2006-0084	n/a	Net Energy Metering Status Report (Filed Annually as Non-Docketed)	Total number of installations and the total rated generating capacity of net metered customer facilities in each of their service territories.	Annually	The Companies propose to discontinue this report as the NEM program has been closed for over 5 years and new customers are not being added. In addition, the Customer Engagement Scorecard (or metrics) will cover customer participation and retention in DER programs which will include NEM customers.	DER

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
2007-0341	For Approval of Extension to the Commercial and Industrial Direct Load Control Program and Recovery of Program Costs	CIDLC Quarterly Reports	"HECO shall continue to file its Annual Program Accomplishments and Surcharge ("A&S") and Monitoring and Evaluation ("M&E") Reports in Docket No. 2007-0341 and disclose any program modifications that will be proposed for the upcoming program year." "HECO shall file monthly reports regarding the CIDLC Program in Docket No. 2007-0341. The monthly reports shall include a monthly breakdown of HECO's annual CIDLC Program budget, actual monthly CIDLC Program expenditures, year to date expenditures for the CIDLC Program, and information on the demand savings achieved by the program. HECO shall not exceed the monthly budget without prior approval of the commission." PUC Order 30246, dated 3/7/2012 in Docket No. 2007-0341 states, "HECO's request to make certain budget formatting changes and modify the RDLC and CIDLC reporting period from monthly reporting to quarterly reporting is approved".	Quarterly	Hawaiian Electric requests to file this report on an annual basis instead of quarterly. Currently, the CIDLC program is the only DSM program reported quarterly, while the RDLC and Fast DR program expenses are reported on an annual basis in the A&S report. The intent of this request is to align the reporting of the CIDLC program with the RDLC and Fast DR programs. Key information regarding DRAC reconciliation would continue to be filed quarterly.	DER
2011-0206	Instituting a Proceeding to Investigate the Implementation Of Reliability Standards for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited	Monthly IRS Reports	Pursuant to Order No. 32053, Ruling on RSWG Work Product, filed on April 28,2014 in Docket No. 2011-0206. Details about interconnection requirements studies: • Total number of interconnection requests • Number of interconnection requests for which an IRS is required • Date each IRS was initiated • Maximum kW electrical output of the applicable generating system • Distribution substation and circuit serving each project • Proposed in-service date • Length of time an IRS has been pending • Explanations as to circumstances causing any delays in performing the IRS • Cost of mitigation measures that are applied on the utility-side of the interconnection • Cost of IRSs • Rate schedule of the interconnection request	Monthly	The Companies propose to discontinue this report as replaced by (or to the extent replaced by) the Interconnection PIM and Interconnection Experience Scorecard. In addition, customers are now able to check status of their applications using the Customer Interconnection Tool (CIT).	DER
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Interim TOU Annual Status Report	Ordering Paragraph No. 2 of Order No. 33293 states: "The HECO Companies shall file an annual report with the commission no later than January 31 of each year, with the first report due by January 31, 2018."	Annually	The Companies propose to discontinue this report as the Customer Engagement Scorecard (or metric) will cover customer participation and retention including TOU.	DER
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Interim TOU Quarterly Enrollment Report	Ordering Paragraph No. 3 of Order No. 33293 states: "The HECO Companies shall file quarterly updates with the commission as described herein." Order No. 33923 Section IV, Findings and Conclusions, Paragraph No. 14 which states: "In addition to the annual filing, the HECO Companies shall also provide quarterly updates to the commission and Parties regarding enrollment numbers, including a detailed tally of enrollments and drop-outs by customer type."	Quarterly	The Companies propose to discontinue this report as the Customer Engagement Scorecard (or metric) will cover customer participation and retention including TOU.	DER
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	DER Quarterly Technical Report	Pursuant to Decision and Order No. 34924 (at 191), issued October 20, 2017 in Docket No. 2014-0192, as amended by Ordering Paragraph 2 of Order No. 36538, issued September 24, 2019 in the subject proceeding. DER Technical Report covers (a) CGS+ curtailment (b) improvements to DER integration analyses (c) non-compliant CSS systems and monitoring data from NEM+ systems by Order No. 35563 issued June 29, 2018 in Docket No. 2014-0192 (d) Smart Export by Order No. 36476 Ordering Paragraph No. 2 which states that the Companies shall report on the Smart Export program, similar to the CSS and NEM+ program.	Quarterly	The Companies propose to discontinue reporting on Customer Grid Supply Plus (CGS+) curtailment in this report, to the extent that reporting on curtailment is replaced by the DER Asset Effectiveness metric.	DER
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Weekly interconnection queue	Pursuant to Order No. 32737 issued March 31, 2015 the Companies have developed this format and weekly distribution process with Commission staff.	Weekly	The Companies propose to discontinue this report as it will be duplicative with the Interconnection PIM.	DER
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	DER Quarterly Interconnection Report	Ordering Paragraph No. 17 of Decision and Order No. 33258 states: "The HECO Companies shall continue to submit the weekly report electronically, and shall formally file a quarterly summary in this docket that summarizes the content of the weekly reports. The HECO Companies shall work with commission staff to develop the appropriate format and content of the quarterly summary."	Quarterly	The Companies propose to discontinue this report as it will be duplicative with (or to the extent that this report is duplicative with) the Interconnection PIM. The Company also proposes to stop reporting on hosting capacity as it is no longer relevant.	DER

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Key Technical Developments to Enable DER Market Growth	Pursuant to Order No. 32737 issued March 31, 2015 to provide updates on the progress being made by the Companies to utilize advanced technologies and grid-supportive distributed energy resources ("DER") functions to allow further integration of DER systems. Consistent with Order No. 32737, the Companies have developed a monthly distribution process with Commission staff.	Monthly	The Companies question the current value of and continued need for this report, noting that advanced inverter functionality has migrated to standard business practice, and the Companies propose that this report be considered for discontinuation. The Companies further note that the DER Asset Effectiveness metrics will report on DER systems capable of providing grid services, and the utilization of those grid services. The Companies alternatively, in the interest of efficiency, propose to file this report on an annual basis instead of monthly.	DER
2011-0040	For Approval of the Fifth Amendment to the Purchase Power Contract for the Unscheduled Energy and the Purchase Power Agreement with Puna Geothermal Venture and the for Approval to Recover the Purchased Poser Costs through its Energy Cost Adjustment Clause and Firm Capacity Surcharge or Purchased Power Adjustment Clause.	Reporting Requirement on curtailment	5. HELCO shall submit to the Commission and the Consumer Advocate, a report detailing the extent of any curtailments made to renewable generation facilities after the commencement of the PGV Expansion. 6. The curtailment report shall be provided on a monthly basis for the PPA term.	Monthly	The Companies propose to eliminate this report because the curtailment data provided in this report is also captured by the RSWG (2011-0206) Monthly Report. The RSWG monthly report includes all curtailment data for all renewable generation for all of Hawaiian Electric's services territories, and thus, is being reported twice.	Sys Ops
2016-0342	For Approval of Waiver from the Framework for Competitive Bidding And to Commit Funds in Excess of $2,500,000 (excluding Customer Contributions) for the Purchase and Installation of Item P0003966, West Loch PV Project.	Monthly Curtailment Report	5. HECO shall provide filings and documentation regarding its reporting requirements for the Project, which include annual reporting on O&M costs, and monthly reporting on curtailment (as specified in Section II.D, above).	Monthly	The Companies propose to eliminate this report because the curtailment data provided in this report is also captured by the RSWG (2011-0206) Monthly Report. The RSWG monthly report includes all curtailment data for all renewable generation for all of Hawaiian Electric's services territories, and thus, is being reported twice.	Sys Ops
2011-0206	Instituting a Proceeding to Investigate the Implementation of Reliability Standards for HECO/HELCO/MECO	Monthly Report	(1) system frequency control performance during month; (2) significant system events during month; and (3) curtailment of non-dispatchable renewable resources.	Monthly	The Companies propose to consolidate the curtailment reports for the PGV (2011-0040) and West Loch PV (2016-0342) renewable energy facilities to the RSWG Monthly Report as it includes all curtailment data for all renewable generation for all of Hawaiian Electric's services territories.	Sys Ops
2016-0168 Trans. No. 13-07 & 13-08	Trans No. 13-07 For Approval to Establish Schedule EV-F - Commercial Public Electric Vehicle Charging Facility Service Pilot, and Schedule EV-U - Commercial Public Electric Vehicle Charging Service Pilot. Trans No. 13-08 For Approval to Modify Tariff Rule 15 — Supply to Separate Premises and Resale of Electric Energy.	Annual Report	Ordering Paragraph 1.c. and d. By March 31st in each of the following year when the pilot program is in effect, the HECO Companies shall file an annual report that is consistent in principle with the scope and parameters agreed-upon by the Companies and other stakeholders, as reflected in Section x, Reporting, pages 20-21, of Transmittal No. 13-07. Unless ordered otherwise by the commission, the first annual report shall be due by March 31, 2014 , and the final annual report shall be due by March 31, 2019. The annual report shall, at a minimum: i. (1) describe and review the adoption and status of Schedules EV-F and EV-U ii. (2) summarize "the costs, capital and expense, as well as revenues, by Schedule EV-F and EV-U tariff and by Company, that have been collected for that reporting year[;]" iii. (3) identity and describe the level and extent of subsidization by non-participating ratepayers, and iv. (4) determine and recommend any revisions to the applicable rate structures that are necessary to: 1. (A) meet the objectives of sufficiently addressing "range anxiety" among EV end-users and conducting the Companies' research, development, and demonstration activities related to EV charging technologies and load control; and 2. (B) minimize the level or non-participating ratepayers.	Annually	Recommendation: Consolidate all EoT Annual Reports (2018-0422, 2016-0168, Transmittal Nos. 13-07, 13-08, 18-06) to Docket No. 2018-0422. Reason: Reporting requirements for 2018-0422, 2016-0168, Transmittal Nos. 13-07, and 13-08 are similar. The reporting requirements for Transmittal No. 18-06 are relatively narrow in scope and participation and would not require a significant amount of effort to consolidate reporting to 2018-0422 annual report. This will also reduce administrative burden on the EoT team as there may be opportunities to streamline data collection, analysis, drafting and submittal under a portfolio approach.	EoT

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
			('cont) Modified by D&O 34592, 6/2/2017 A. Unless ordered otherwise by the commission, Schedules EV-F and EV-U shall be in effect until June 30, 2023. D. In addition to the requirements in Decision and Order No. 31338, the annual reports shall include: (1) a description of the analysis that the Companies are undertaking to assess expected utilization for DCFC facilities expected to be deployed during the extension period, including the impacts of geographical location, existing charging infrastructure, population density, and other demographic factors and system needs; and (2) a discussion of how and to what extent the costs for each DCFC facility have been and/or are proposed to be recovered from ratepayers.			
Transmittal 18-06	For Approval to Establish an Electric Bus Tariff for Schedule J -General Service Demand and Schedule P - Large Power Service, on a Pilot Basis.	Annual Report	C. By March 31st in each of the following year when the pilot program is in effect, the Companies shall file an annual ,report, with the first annual report due by March 31, 2020, and the final annual report due by April 1, 2024. D. The annual report shall include, at a minimum, the following information and data, disaggregated by service territory: (1) The number of customer accounts enrolled in the E-BUS Program. (2) The number of battery electric buses acquired per customer account enrolled in the E-BUS Program. (3) Based on the participants' responses to an annual survey, the participants' feedback regarding the overall experience with and effectiveness of the E-BUS Program. (4) The estimated E-BUS Program implementation costs. (5) Revenues collected under the E-BUS Program. (6) The kWh consumption by TOU period. (7) Assessment of whether a demand charge is appropriate, including the supporting analysis and data. (8) The total number of battery electric bus miles in each pilot program year. (9) The number of customer accounts expected to be enrolled in the next pilot program year. (10) The number of battery electric buses expected for each anticipated customer account. (11) The estimated reduction in greenhouse gas emissions associated with the pilot program, including a description of the methodology used in calculating the emissions and supporting data.	Annually	Recommendation: Consolidate all EoT Annual Reports (2018-0422, 2016-0168, Transmittal Nos. 13-07, 13-08, 18-06) to Docket No. 2018-0422. Reason: Reporting requirements for 2018-0422, 2016-0168, Transmittal Nos. 13-07, and 13-08 are similar. The reporting requirements for Transmittal No. 18-06 are relatively narrow in scope and participation and would not require a significant amount of effort to consolidate reporting to 2018-0422 annual report. This will also reduce administrative burden on the EoT team as there may be opportunities to streamline data collection, analysis, drafting and submittal under a portfolio approach.	EoT

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
2018-0422	For Approval to Establish EV-MAUI Electric Vehicle Fast Charging Service and Related Accounting Treatment.	Annual Report	Transmittal No. 13-07-Schedule EV-F and EV-U Electric Vehicle Charging Services Pilots: Hawaiian Electric Companies' Annual Report filed no later than March 31 every year. The four sites selected to be part of the EV MAUI tariff will also comply with the same reporting requirements. Transmittal No. 13-07 reporting requirements: Ordering Paragraph 1.c. and d. By March 31st in each of the following year when the pilot program is in effect, the HECO Companies shall file an annual report that is consistent in principle with the scope and parameters agreed-upon by the Companies and other stakeholders, as reflected in Section x, Reporting, pages 20-21, of Transmittal No. 13-07. Unless ordered otherwise by the commission, the first annual report shall be due by March 31, 2014 , and the final annual report shall be due by March 31, 2019. The annual report shall, at a minimum: i. (1) describe and review the adoption and status of Schedules EV-F and EV-U ii. (2) summarize "the costs, capital and expense, as well as revenues, by Schedule EV-F and EV-U tariff and by Company, that have been collected for that reporting year[;]" iii. (3) identity and describe the level and extent of subsidization by non-participating ratepayers, and iv. (4) determine and recommend any revisions to the applicable rate structures that are necessary to: 1. (A) meet the objectives of sufficiently addressing "range anxiety" among EV end-users and conducting the Companies' research, development, and demonstration activities related to EV charging technologies and load control; and 2. (B) minimize the level or non-participating ratepayers.	Annually	Recommendation: Consolidate all EoT Annual Reports (2018-0422, 2016-0168, Transmittal Nos. 13-07, 13-08, 18-06) to Docket No. 2018-0422. Reason: Reporting requirements for 2018-0422, 2016-0168, Transmittal Nos. 13-07, and 13-08 are similar. The reporting requirements for Transmittal No. 18-06 are relatively narrow in scope and participation and would not require a significant amount of effort to consolidate reporting to 2018-0422 annual report. This will also reduce administrative burden on the EoT team as there may be opportunities to streamline data collection, analysis, drafting and submittal under a portfolio approach.	EoT
			('cont) Modified by D&O 34592, 6/2/2017 A. Unless ordered otherwise by the commission, Schedules EV-F and EV-U shall be in effect until June 30, 2023. D. In addition to the requirements in Decision and Order No. 31338, the annual reports shall include: (1) a description of the analysis that the Companies are undertaking to assess expected utilization for DCFC facilities expected to be deployed during the extension period, including the impacts of geographical location, existing charging infrastructure, population density, and other demographic factors and system needs; and (2) a discussion of how and to what extent the costs for each DCFC facility have been and/or are proposed to be recovered from ratepayers.			
2013-0397	For Approval of the Supply Contract For Biodiesel (B99) Fuel with Pacific Biodiesel Technologies, LLC	Quarterly Report	(1) the invoice date; (2) the invoice number; (3) the price paid to Pacific Biodiesel Technologies, LLC ("PBT"); (4) the price the Hawaiian Electric Companies would have paid to Chevron Products Company adjusted for BTU content; (5) the price the Hawaiian Electric Companies would have paid to Hawaii Independent Energy, LLC adjusted for BTU content; and (6) the volume purchased.	Quarterly	The Companies propose to modify the quarterly reporting requirements in Docket No. 2013-0397 regarding the Supply Contract for Biodiesel (B99) Fuel ("Biodiesel Spot Buy Contract") to filing a quarterly report only if spot market purchases are made within the past quarter. For reference, no spot market purchases were made under this contract in the last four years.	Fuels

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
2010-0172	For Approval of Hawaiian Electric Company, Inc.'s Consent to Second Amendment to Facility Fuel Supply Contract Between Kalaeloa Partners, L.P. and Tesoro Hawaii Corporation And to Include the Second Amendment To Facility Fuel Supply Contract Costs in Hawaiian Electric Company, Inc.'s Energy Cost Adjustment Clause.	Status Reports	(1) the invoice date; (2) the invoice number; (3) the pre-tax calculated price per barrel in accordance with the Second Amendment price formula, and (4) the volume purchased. • Status report on the Companies' fuel and biofuel supply RFPs	Quarterly	The Companies propose to discontinue the filing of the quarterly reporting requirements in Docket Nos. 2010-0172, 2014-0069, 2017-0393, and 2018-0413. The Companies do not have a good understanding of whether these reports are helpful to the Commission and Consumer Advocate or could be eliminated or consolidated. If desired, the Companies could make this information available to the Commission and Consumer Advocate upon request. If the Commission is inclined to continue these reporting requirements, the Companies suggest that for administrative efficiency and ease of locating information, the Commission modify the reporting requirements to (1) consolidate the fuels reports into Docket No. 2018-0413, such that all reports can be filed in one docket and subject to one protective order, and/or (2) change the frequency of the reporting from quarterly to annual to reduce number of reports filed.	Fuels
2014-0069	For Approval of Supply Contract for) Ultra Low Sulfur Diesel Fuel with Lanai Oil Company, Inc. and to Include Contract Costs in Maui Electric Company, Limited's Energy Cost Adjustment Clause	Fuels Quarterly Report	(A) invoice date; (B) invoice number; (C) pre-tax calculated price per barrel in accordance with the ultra-low sulfur diesel ("ULSD") contract price formula; and (D) volume of ULSD purchased.	Quarterly	Same as above.	Fuels
2017-0393	For Approval of the Biodiesel Supply Contract with Pacific Biodiesel Technologies, LLC, and to include the Biodiesel Supply Contract Costs in Hawaiian Electric's Energy Cost Adjustment Clause.	Quarterly Status Report	(A) invoice date; (B) invoice number; (C) purchase price in accordance with the Pacific Biodiesel Technologies, LLC contract price formula; (D) volume of biodiesel purchased; and (E) quantity of biodiesel consumed at the Company's combustion turbine generating unit at the Schofield Generating Station, the Honolulu International Airport Emergency Power Facility, and any other facility on the island of O'ahu.	Quarterly	Same as above.	Fuels
2018-0413	For Approval of Petroleum Fuel Supply Contract with Par Hawaii Refining, LLC and Fuel Terminalling Agreement with IES Downstream, LLC and to include the Contracts' Costs in the Companies' E	Quarterly Fuel Report	(A) the invoice date; (B) the invoice number; (C) the pre-tax calculated price; (D) the purchased volume. • Status report on the Companies' fuel and biofuel supply RFPs	Quarterly	Same as above.	Fuels

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
2010-0172	For Approval of Hawaiian Electric Company, Inc.'s Consent to Second Amendment to Facility Fuel Supply Contract Between Kalaeloa Partners, L.P. and Tesoro Hawaii Corporation And to Include the Second Amendment To Facility Fuel Supply Contract Costs in Hawaiian Electric Company, Inc.'s Energy Cost Adjustment Clause.	Status Reports	Semi-annual status report on the Companies' Fuels Master Plan	Semi-Annually	The Companies propose to discontinue the filing of the Companies' Fuels Master Plan. The original Fuels Master Plan, which is a successor to the Fuel Infrastructure Strategic Plan ("FISP"), was filed on February 22, 2012, in Docket No. 2009-0346. This reporting requirement was developed many years ago and circumstances have changed such that this report is no longer necessary. Detailed fuel supply and fuel infrastructure strategies were provided in the Hawaiian Electric Companies' January 29, 2016 FMP filed as Attachment D to the transmittal letter filed on January 29, 2016, in Docket No. 2012-0217. The January 29, 2016 FMP has served as the baseline report, which is updated semi-annually. For efficiency and ease of review, the Companies have undertaken an effort to streamline the update to the FMP, and only provides updates to the baseline FMP, rather than repeatedly summarizing historical fuel supply and infrastructure strategies. There has not been significant changes to the FMP filing since it has been streamlined. The Companies anticipate limited investment in fossil fuel infrastructure going forward and propose to discontinue the FMP until any significant fuel-related infrastucture changes warrant updating the January 2016 baseline report.	Fuels
2018-0413	For Approval of Petroleum Fuel Supply Contract with Par Hawaii Refining, LLC and Fuel Terminalling Agreement with IES Downstream, LLC and to include the Contracts' Costs in the Companies' Energy Cost Adjustment Clause	Semi-Annual Progress Report	Semi-annual status report on the Companies' Fuels Master Plan	Semi-Annually	Same as above.	Fuels
n/a	n/a - Commission informal request	Service Reliability Report	In September 2012, the Commission requested that the Hawaiian Electric Companies provide quarterly service reliability reports. For the first quarterly report submit data for the first 3 quarters of 2012 and target filing in mid-November 2012.	Quarterly	The Company proposes to eliminate this reporting requirement because it is similar to what is reported ~~on~~ in the Annual Service Reliability Report filing. This informal quarterly report is only emailed to the PUC. A portion of the information is also duplicated, as it is reported quarterly on the Company website as part of the Schedule A order and provided for reliability PIMs in the company's annual Decoupling Filing. See below for the differences between the website and the Quarterly Service Reliability Report:	

Hawaiian Electric Companies
List of Reports Recommended for Elimination or Consolidation to Streamline Reporting

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency	Proposal	Category
					(cont') Website (multiple years) -Provides the 12-month rolling average for each of SAIDI, SAIFI, CAIDI, and MAIFI for each operating company for the most recent eight quarters (graphs only) -Includes quarterly SAIDI, SAIFI, CAIDI, and MAIFI for each operating company for the most recent eight quarters -Includes list of Major Event Days for the most recent eight quarters (in the download file). The Quarterly Report only lists Major Event Days YTD for the current report year. -Includes annual SAIDI, SAIFI, CAIDI, MAIFI results for at least the past 10 years (in the download file) Quarterly Report (current year data only) -Includes results individually for Maui, Molokai, and Lanai. (Mentioning this for internal completeness only, I don't think this helps the strengthen the justification.) -Includes breakdown by System (All, T&D, Utility Generation, Non-Utility Generation). (Also don't think this helps strengthen the justification). -Note: While the Maui, Molokai, and Lanai island breakdowns and System breakdowns are not available on the website, they are available on an annual basis in the Annual Service Reliability Report filing.	
n/a	n/a - Commission informal request	Call Center Summary and Stats	In September 2012, the Commission requested that the Hawaiian Electric Companies provide 5 call center metrics. The first submission to begin for the month of October (15 days after the prior month). Similar to what is reported on Website, only emailed to PUC	Quarterly reporting began in 2014	The Company proposes to eliminate this reporting requirement because it is similar to what is reported in the Companies' Annual RBA Rate filing - Performance and Financial Incentive attachment and the Company's Key metric's website. Please see below for the metrics reported in the Annual RBA Rate filing, Company's Key Metrics website, and Quarterly Call Center Summary report: Annual RBA Rate Filing – Performance and Financial -Incentive: -Total Calls -Calls Answered Within 30 Seconds -Service Level Key Performance Metric's Website (updated quarterly): -Service Level Quarterly Call Center Summary: -Total Calls -Service Level -% Abandoned -Average Seconds Answered -% Forced Busy	

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Service Reliability** - SAIDI, SAIFI, CAIDI, MAIFI, Emergency Response Time	Quarterly
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Power Supply & Generation** - IPP Generation, WEAF, WEFORd, WEFOF, Losses and Unaccounted Energy	Quarterly
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Customer Service** - Customer Transaction Survey Results, Service Level, Customer Complaints, Bill Accuracy, Percentage of Meters Read, Orders and Appointments	Quarterly
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Financial** - Ratemaking ROE, Credit Ratings	Quarterly
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Safety** - Total Case Incident Rate, Lost Time Rate, Public Safety Incidents	Quarterly
Website 2013-0141	Instituting an Investigation to Reexamine the Existing Decoupling Mechanisms for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited.	Key Performance Metrics Website	• **Rates and Revenues** - Cost of Final Delivered Energy to Customers by Rate Class for Each Island System, Contributing Cost Components to Customer Rates, Recovery of Fuel & Purchased Energy Costs, Time of Use Metric	Quarterly
6432	n/a	HECO Service Reliability Reports	Availability of electrical service during a given period of time (Average Service Availability Index or ASAI), the average frequency or number of times customers experience a sustained interruption of service during a given period of time (System Average Interruption Frequency Index or SAIFI), the average length of time an interrupted customer is without power during a given period of time (Customer Average Interruption Duration Index or CAIDI), and the average length of time customers are without power during a given period of time (System Average Interruption Duration Index or SAIDI).	Annually

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
6432	n/a	HELCO Service Reliability Reports	Availability of electrical service during a given period of time (Average Service Availability Index or ASAI), the average frequency or number of times customers experience a sustained interruption of service during a given period of time (System Average Interruption Frequency Index or SAIFI), the average length of time an interrupted customer is without power during a given period of time (Customer Average Interruption Duration Index or CAIDI), and the average length of time customers are without power during a given period of time (System Average Interruption Duration Index or SAIDI).	Annually
6432	n/a	MECO Service Reliability Reports	Availability of electrical service during a given period of time (Average Service Availability Index or ASAI), the average frequency or number of times customers experience a sustained interruption of service during a given period of time (System Average Interruption Frequency Index or SAIFI), the average length of time an interrupted customer is without power during a given period of time (Customer Average Interruption Duration Index or CAIDI), and the average length of time customers are without power during a given period of time (System Average Interruption Duration Index or SAIDI).	Annually
99-0207	For Approval of Rate Increases and Revised Rate Schedules.	Hawai'i Electric Light Annual Calibration Factor Report	Annual Calibration Factors of Industrial Fuel Oil, Diesel, and Total System	Annually
03-0158	For Approval: (1) to Donate Retired Personal Computers to Four Non-Profit Organizations; and (2) of an Annual Reporting Requirement in Lieu of Prior Commission Approval.	Donations of Retired PCs to Non-Profit Organizations	Report to identify if: PC, Monitor, Printer, Accessories, Components, Laptop, or Misc. Report to identify: Original cost, Net Book Value, Estimated age in years.	Annually Dec 1 (for Nov 1 thru Oct 31 each year)
03-0257	For Exemption From and Modification of General Order No.7, Paragraph 2.3(g), Relating to Capital Improvements.	Capital Projects Completed	1. Completed Projects with a Total Cost of Less Than $2.5 Million. Itemize each completed project with the actual costs incurred, with an explanation of any deviations of plus or minus fifteen (15) percent from the budgeted cost, and a general discussion of the reasons causing the variance. 2. Completed Projects with a Total Cost of $2.5 Million or More. Identify each completed project and its total cost.	Annually
04-0113	For Approval of Rate Increases and Revised Rate Schedules and Rules.	Hawaiian Electric Annual Calibration Factor Report	Annual Calibration Factors of Kahe Power Plant and Waiau Power Plant Steam Units	Annually
05-0195	Instituting Proceedings Relating to the Determination of the Appropriate Fees and Assessments to Finance the Administration and Operation of the One Call Center.	One Call Center PUC Petition letter	As an initial matter, each public utility operator who petitions the commission for approval to apply a portion of its PUC Fee payments as a credit toward its OCC Fees shall do so by filing a letter with the commission requesting a PUC Fee credit and specifying the OCC Invoice Number and amount(s) to which it wishes to apply any awarded credit ("Petition Letter").	Annually (Jan/Feb timeframe)

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2006-0186	For Approval of a Combined Heat and) Power Agreement with Castle & Cooke) Resorts, LLC, and Approval to) Include the Combined Heat and Power) System Fuel Costs in Maui Electric) Company, Limited's Energy Cost) Adjustment Clause.	MECO CHP Annual Status Report	6. MECO shall file an annual status report by February 28 of each year, with copies served on the Consumer Advocate, of the CHP System operation that will include information on: (A) the CHP System heat rate, system availability and run hours and outage hours, and mode of operation; (B) estimated versus actual kW and kWh output of the CHP System 2006-0186 44 generating units, and (C) estimated versus actual thermal output of the CHP System. Unless ordered otherwise, the first annual status report shall be due by February 28, 2009.	Annual 2/28
2006-0387	For Approval of Rate Increases and Revised Rate Schedules.	Maui Electric Annual Calibration Factor Report	Annual Calibration Factor of Kahului Power Plant, Maalaea Power Plant, and Total System	Annually
2006-0425	Pay As You Save	PAYS Solar Program	The number of program participants; Customer information, including name, address and other contact information (confidential customer information will be provided under a protective order); The program costs; The number of customers who default on the loan; The number of defaults resulting in collections procedures and ultimately disconnected service; The number of changes of electric account holders; The number of owner occupants; The number of landlords; The cost and average cost of each system based on size; The average life cycle savings for each system at the time of enrollment. Savings would be based on normalized impact evaluations; The number of applicants that are rejected and the reasons for the rejection; and The resulting impacts of the cost-benefit analysis from the reassignments of system loan repayments (default rates)	Annually (March 31)
2007-0008	RPS Proceeding	Renewable Portfolio Standards (RPS)	(2) Electric utilities are required to annually file an RPS report with the commission no later than June 30th of each year through 2021.	Annually June 30
2007-0341	DSM Reports and Program Modification Requests	DSM Accomplishments and Surcharge Report	The A&S Reports serve three purposes. First, the A&S Reports document the accomplishments of the programs during the previous calendar year. These accomplishments include an accounting of the energy and demand savings impacts, equipment installations and expenditures based on full, calendar-year data. Second, the A&S Reports reconcile the revenues collected from the cost recovery surcharge adjustment and actual program costs incurred. Third, the A&S Reports establish and document program cost-effectiveness based on recorded costs and measure adoptions.	Annually Mar 31

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2007-0341	DSM Reports and Program Modification Requests	DSM Measurement and Evaluation Report	The M&E Reports serve three purposes. First, the M&E Reports forecast the budgets and impact (i.e., energy and demand savings) goals for the upcoming calendar year. Second, the M&E Reports describe the modifications in program processes that the HECO Companies propose to introduce in the upcoming calendar year. Third, the M&E Reports provide results of both the program Impact Evaluation Reports and the program process evaluations, as they become available.	Annually Nov 30
2007-0341	Instituting a Proceeding to Review Hawaiian Electric Company, Inc. Hawaii Electric Light Company, Inc. and Maui Electric Company, Ltd. 's Demand-Side Management Reports and Requests for Program Modifications	C&I DSM Adjustments	2. The commission approves the HECO Companies' March 18, 2019 request to recover a portion of the Revised DR Portfolio variable costs through HECO's and MECO's DSM Surcharge. This quarterly filing is a reconciliation of DSM (Aggregator cost) and DRAC (over/under spend reconciliation of incentives from current DR programs).	Quarterly
2007-0416	Proceeding To Examine HECO/HELCO/MECO's Proposal for a Renewable Energy Infrastructure Program.	REIP Surcharge Reporting Requirements	g. The Commission will review the benefits and continued need for the REIP every three years, earlier if necessary, for the HECO Companies simultaneously. i. To facilitate the Commission's review, the HECO Companies shall file annual reports no later than January 31 of each year addressing topics including but not limited to: 1. projects that were included in the REIP and the status of cost recovery under the REIP Surcharge 2. a general assessment of how the REIP worked in the preceding period 3. benefits of the REIP to the HECO Companies, including any improvements to the HECO Companies' credit ratings as a result of the REIP 4. economic benefits to ratepayers stemming from the REIP 5. any problems encountered by the HECO Companies related to the REIP and any corrective measures taken by the HECO Companies in response to these problems ii. To further facilitate the review process, the HECO Companies shall file a report three years after implementation of the REIP Surcharge – the Commission shall initiate an investigation of the REIP and the REIP Surcharge and consider, among other things, whether continuation of the REIP and REIP Surcharge provide the ratepayer with a quantifiable economic benefit.	Annually Jan 31

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2007-0416	Proceeding To Examine HECO/HELCO/MECO's Proposal for a Renewable Energy Infrastructure Program.	REIP Surcharge Reporting Requirements	g. The Commission will review the benefits and continued need for the REIP every three years, earlier if necessary, for the HECO Companies simultaneously. i. To facilitate the Commission's review, the HECO Companies shall file annual reports no later than January 31 of each year addressing topics including but not limited to: 1. projects that were included in the REIP and the status of cost recovery under the REIP Surcharge 2. a general assessment of how the REIP worked in the preceding period 3. benefits of the REIP to the HECO Companies, including any improvements to the HECO Companies' credit ratings as a result of the REIP 4. economic benefits to ratepayers stemming from the REIP 5. any problems encountered by the HECO Companies related to the REIP and any corrective measures taken by the HECO Companies in response to these problems ii. To further facilitate the review process, the HECO Companies shall file a report three years after implementation of the REIP Surcharge – the Commission shall initiate an investigation of the REIP and the REIP Surcharge and consider, among other things, whether continuation of the REIP and REIP Surcharge provide the ratepayer with a quantifiable economic benefit.	Annually
2008-0083	For Approval of Rate Increases And Revised Rate Schedules and Rules.	Hawaiian Electric Revised PPAC Tariffs	Revised PPAC Tariffs	Monthly
2008-0273	Feed-In Tariff Investigation	Feed-In Tariff: 1. Annual Status Report 2. FIT contracts (seek to discontinue)	1. Status reports on the progress of the FIT program that contain the information outlined on page 88 of the September 25, 2009 Decision and Order. (a) Number of project applications received by island, by resource type, by project size, and interconnection process (Rule l4H or IRS at sub-transmission level). (b) Number and status of projects currently in the queue by island, by resource type, and by project size. (c) Number of projects completed, interconnected, contract signed by island, by resource type, by project size (d) Total kilowatt-hour purchased through FITs during the calendar year by island, and by project size. (e) Total amount in dollars of the power purchased through FITs during the calendar year by island, by project, and by project size. (f) Number and duration of curtailments and the reason for each curtailment during the year by island and by project. (g) Program administration information such as the time spent to complete processing a project application from date of receipt of contract application to interconnecting the project in the system by island, by resource type, and by project size. 2. File FIT contracts for notification purposes (pg 87 of D&O). The utility, however, should still file the contract with the commission for notification purposes. This will significantly streamline the FIT process.	1. Annual Jan 31 2. As Rqd

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2008-0329	For Waiver of the Airport Dispatchable Standby Generation Project from the Competitive Bidding Framework, Approval of a Dispatchable Standby Generation Agreement with the State of Hawaii Department of Transportation, Approval of the Dispatchable Standby Generation Project Cost Accounting, Approval to Include the Project Fuel Costs in Hawaiian Electric Company, Inc.' s Energy Cost Adjustment Clause, arid Approval to Commit Funds in Excess of $2,500,000.	Annual DSG Project status report	6. By February 28 of each year, HECO shall file with the commission an annual DSG Project status report that includes the following information based on the previous calendar year period: (A) EPF run hours; (B) estimated versus actual kW and kWh output of the EPF Generators; and (C) a summary of reimbursable maintenance and fuel costs. (Decision and Order, p. 39, June 25, 2009) Dkt 2009-0317 (Amendment No. 1 to the Dispatchable Standby Generation Agreement) filed 11/5/2009. Decision and Order issued 3/2/2010 approving and closing docket. Project went into service 2014. First Annual report to be filed will be February 28, 2015.	Annually starting February 28, 2015
2009-0163	For Approval of Rate Increases and Revised Rate Schedules.	Maui Electric Revised PPAC Tariffs	Revised PPAC Tariffs	Monthly
2009-0164	For Approval of Rate Increases And Revised Rate Schedules and Rules.	Hawai'i Electric Light Revised PPAC Tariffs	Revised PPAC Tariffs	Monthly
2010-0137	For Approval to Modify Rule 14, Service Connections and Facilities on Customer's Premises.	Rule 14 (Service Connections) Annual Status Report	3. HECO shall file an annual status report by the end of February of the following year, which contains the following information: (A) the number of service connections replaced; (B) the annual costs incurred; and (C) any service connection replacements that were deferred to another year due to the annual capital expenditure limit approved by the commission herein. The annual status report shall also include information on: (A) the average and median costs , respectively, of replacing a single residential direct buried service connection; (B) the range of costs for replacing a single residential direct buried service connection, from the lowest cost to the highest cost; and (C) the reasons for the variation in such costs.	End of February (Annually)
2011-0206	Instituting a Proceeding to Investigate the Implementation of Reliability Standards for HECO/HELCO/MECO	Reliability Report	(1) system frequency control performance during month; (2) significant system events during month; and (3) curtailment of non-dispatchable renewable resources.	Monthly

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2011-0206	Instituting a Proceeding to Investigate the Implementation Of Reliability Standards for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited	Reliability Report	3. The HECO Companies shall file monthly reliability reports with the commission. (The first filing shall also contain reports for the immediately preceding six months.) 1) System frequency control performance during month: a) Frequency duration plot based on the highest resolution SCADA data available for the month detailing how many seconds each power system operated at frequencies above 60 hertz and at frequencies below 60 Hz. b) Tabulation of the number, magnitude and duration of frequency excursions (high and low) outside normal frequency control range (59.95 to 60.05 Hz). 2) Significant system events during month: a) Tabulation of contingency reserve activations including date and time, MW magnitude, duration, and triggering event. b) Tabulation of under frequency load shed activations including date and time, triggering frequency, MW magnitude, duration, and triggering event. c) Tabulation of demand response activations for system events, including date and time, MW magnitude, duration, and triggering event, (excluding demand response utilization for unit commitment deferral or system operations economics.) 3) Curtailment of non-dispatchable renewable resources: a) Tabulation of each curtailment event for each resource including the starting date and time, duration, megawatt hours curtailed, peak MW curtailed, and reason for curtailment. b) Total MWh of non-dispatchable renewable resources curtailed for the month.	Monthly Starting June 30, 2014
2011-0351	For a Declaratory Order Regarding the Exemption of Kalaeloa Partners, LP's Project From the Framework for Competitive Bidding, or in the Alternative, Approval of Application for Waiver from the Framework for Competitive Bidding.	Annual Status Report	1. HECO shall file as a non-docketed filing, an annual report which describes: (A) the status of its negotiations with KPLP; (B) the status of KPLP's ability to utilize and obtain other fuel sources, whether renewable or fossil fuel resources; and (C) any actions taken by HECO to conduct parallel planning as authorized under the CB Framework, including, but not necessarily limited to, actions to obtain additional resources of generation, such as through the on-going competitive bidding process in In re Public Util. Comm'n, Docket No. 2011-0039. 2. The annual report shall: (A) cover the previous calendar period; and (B) be due by January 31st of the following year. The first annual report shall: (C) cover the 2012 calendar year period; and (D) be due by January 31, 2013.	Annual by January 31st
2012-0043	Instituting a Proceeding to Assess the Excavation Activities of Pest Control Operators.	Report of Incidents of damage	2. TGC, HTI, Hawaiian Electric, and KIUC shall provide the commission with a report listing incidents of damage to underground installations caused by pest control operators, and incidents of injuries resulting from damage to underground installations caused by pest control operators. The report shall be filed with the commission on an annual basis, not later than March 31 of each year, and only in the event that such incidents occurred. The information in the report should include, but not be limited to, the date or dates of the incident, the location of the incident, the cause of damage to subsurface installation or injury resulting from damaged subsurface installation, a description of the damage caused or injury sustained, the depth of the subsurface installation at the time contact made or damage occurred, the cost of the damage and repair, the utility owning the damaged subsurface installation, the pest control operator, and the party or parties responsible for the cost of repair.	Annual by March 31

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2012-0331	For Approval to Defer Certain Computer Software Development Costs for Item Y00180, Interactive Voice Response System Replacement, to Accumulate an Allowance for Funds Used during Construction during the Deferral Period, to Amortize the Deferred Costs, and to Include the Unamortized Deferred Costs in Rate Base.	Annual Summary Report	7. The Companies shall thereafter submit an annual summary to the commission and Consumer Advocate, with the first such report due on December 31, 2016, containing the information specified in Ordering Paragraph No. 6, including any changes to target or required customer service performance levels, for the duration of the time that the Companies use the Genesys IVR system for their IVR needs. Ordering Paragraph No. 6: 6. The Companies must submit a detailed summary of their IVR survey and assessment results, including a definition of targeted and required customer service performance levels, as well as information about current CSR numbers and the Companies' plans to hire additional CSRs, to the commission and Consumer Advocate within six (6) months after the date of filing of this Order.	Annual report - First report due December 31, 2016
2013-0397	For Approval of the Supply Contract For Biodiesel (B99) Fuel with Pacific Biodiesel Technologies, LLC	Quarterly Report	Refer to page 35 of D&O 32154 Provide quarterly reporting regarding the items listed in the Application at page 9, and, through these reports, keep the Commission and the Consumer Advocate apprised of any future negotiations with PBT. As to the latter, the Companies will file the quarterly report by the end of the month following the calendar quarter end, for example, the quarterly report for the first quarter January through March will be filed at the end of April. (1) the invoice date; (2) the invoice number; (3) the price paid to PBT; (4) the price the HECO Companies would have paid to Chevron adjusted for Btu content; (5) the price the HECO Companies would have paid to HIE adjusted for Btu content; and (6) the volume purchased. 26 The Companies will file the first quarter January through March will be filed at the end of April.	Quarterly
2014-0170	For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment.	Semil Annual Enterprise System Benefits Report	A. The Companies shall file their Annual Enterprise System Benefits Report semi-annually by February 28 and August 31 of each year, instead of just annually. Said report shall be re-titled Semi-Annual System Benefits Report, with the first report due by February 28, 2019. Said reports should, at a minimum, fully detail the costs and savings attributable to the ERP/EAM Project for independent identification and validation.	Every 6 Months

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2014-0170	For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment.	ERP Monthly Reports	Adopting Supplental Information For the Companies Monthly Status Reports. Order No. 34526, filed 5/3/17 A. A copy of the current Microsoft project plan at Summary Task level, updated with progress, which includes, at a minimum, major deliverables progress against forecast, in sufficient detail such that the commission and the Consumer Advocate can confirm areas of progress or identify major issues impeding said progress. B. Additional cost information detail which breaks out internal labor costs, external/contract labor costs, and materials and purchased services costs. Moreover, for each category, the actual vs. budgeted expenditures must be shown. C. Project staff levels must: (A) be identified as the number of resources by month versus the project plan; and (B) include the number of backfilled positions. D. Material changes, risks, issues, decisions, and status (i.e.' "CRIDS"), raised or discussed at the Executive Steering Group level. E. A list of completed and incomplete deliverables for the reporting period. F. Updates regarding material impacts the CBRE project may have on customer information service integration for the ERP/EAM Project as actual CBRE requirements become known. G. Monthly variances that are both 10% over monthly total budgeted costs and exceed $100,000.	Monthly
2014-0354	For Approval of Power Purchase Agreement for Renewable As-Available Energy with EE Waianae Solar Project LLC.	Compensable Curtailed Energy Annual Report	6. By January 31st of each year, for the previous calendar year period, HECO shall file a report, if any, which: (A) quantifies the Compensable Curtailed Energy payments it seeks to recover above the one percent threshold; and (B) explains why the recovery of such payments from ratepayers through the PPAC meets the applicable requirements set forth in HRS § 269-16.22. To the extent applicable, HECO's first annual report, if any, shall be due by January 31, .2017.	By January 31st of each year
2015-0224	For Approval of Power Purchase Agreement for Renewable As-Available Energy with Kuia Solar. LLC.	Annual compensable curtailed energy Report	B. By January 31st of each year, for the previous calendar year period, MECO shall file a report, if any, which: (i) Quantifies the Compensable Curtailed Energy payments it seeks to recover; and (ii) Explains why the recovery of such payments from ratepayers through the PPAC meets the applicable requirements set forth in HRS § 269-16.22. To the extent applicable, MECO's first annual report, if any, shall be due by January 31, 2017.	By January 31st of each year
2015-0225	For Approval of Power Purchase Agreement for Renewable As-Available Energy with South Maui Renewable Resources LLC.	Annual compensable curtailed energy Report	B. By January 31st of each year, for the previous calendar year period, MECO shall file a report, if any, which: (i) Quantifies the Compensable Curtailed Energy payments it seeks to recover; and (ii) Explains why the recovery of such payments from ratepayers through the PPAC meets the applicable requirements set forth in HRS § 269-16.22. To the extent applicable, MECO's first annual report, if any, shall be due by January 31, 2017.	By January 31st of each year

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2016-0192	For Approval to Commit Funds in Excess of $2,500,000 (Excluding Customer Contributions) for Item H0002550, the Waiau Hydro Repowering Project.	Quarterly Status Report	d. On a quarterly basis, HELCO shall file reports which describe the status of: (1) Project completion; and (2) HELCO's efforts in securing a long-term lease from BLNR for the water rights and source water needed to generate hydroelectric power from the Waiau Plant. h. By the seventh business day of January, April, July, and October, for the previous three-month period, HELCO shall file its applicable status report; provided that HELCO's first status report shall be due by November 9, 2017, to cover the preceding July to September 2017 period.	7th business day of Jan, April, July, October. Note: 1st RPT due 11/9/2017
2016-0232	For Approval of Expansion of Fast Demand Response Pilot Program and Recovery of Program Costs.	Violations Report	4. Actual violations of MECO' s Rule 1 and reserve margin criteria shall be reported to the commission within five (5) days after a violation, including the event, date, amount of capacity shortfall, and load, demand response availability, and supply parameters that caused the shortfall. This condition shall supersede the reporting requirement in Ordering Paragraph 4 of Order No. 34437, issued in Docket No. 2016-0234.	within 5 days of violation
2016-0342	For Approval of Waiver from the Framework for Competitive Bidding And to Commit Funds in Excess of $2,500,000 (excluding Customer Contributions) for the Purchase and Installation of Item P0003966, West Loch PV Project.	Annual O&M Report	5. HECO shall provide filings and documentation regarding its reporting requirements for the Project, which include annual reporting on O&M costs.	March 31, Annually
2016-0373	For Approval to Refinance Outstanding Series of Revenue Bonds through the Issuance of Unsecured Obligations and/or Refunding Special Purpose Revenue Bonds and Related Notes and Guarantees, and Authorization to Enter into Related Agreements.	Report on Special Purpose Revenue Bond Financing	Report annually information that will enable the Commission to make the report to the Legislature of the State of Hawai'i as required by Section 6 of Act 148, 1994 Session Laws of Hawai'i (Series 2017A)	Annually
2017-0074	For Approval of the Issuance and Purchase of Common Stock.	Report on the Sale of Common Stock	Price paid per share, the number of shares issued, and the itemized expenses incurred for the stock sale, the allocation of expenses to each Company, and the basis for the allocation (2017-2021)	Other - Within 60 days of sale
2017-0108	For Approval of Amended and Restated Power Purchase Agreement for Renewable As-Available Energy with Waipio PV, LLC, Filed in Docket No. 2014-0359. Lanikuhana Solar, LLC, Filed in Docket No. 2014-0357, and Kawailoa Solar, LLC, Filed in Docket No. 2014-0356.	Annual compensable curtailed energy Report	C. By January 31st of each year, for the previous calendar year period, HECO shall file a report which: (1) Quantifies the Compensable Curtailed Energy payments it seeks to recover above the one percent threshold; and (2) Explains why the recovery of such payments from ratepayers through the PPAC meets the applicable requirements set forth in HRS § 269-16.22. D. HECO shall file an annual Compensable Curtailed Energy Payments report even if the reported amount for the applicable calendar year period is zero, with HECO's first annual report due by January 31, 2018.	January 31 of each year

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2017-0213	For Approval to Recover Costs for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism.	Annual O&M Report	**Reporting Requirements (page 63)** (B) Annual reporting. By March 31 of each year, an annual report on the value and costs of the SGS Project to the HECO system in the previous calendar year shall be filed. Said report shall quantify and discuss fuel use by type, energy production, ancillary services, effects on reliability and resilience of the system, operation and maintenance requirements and costs, and other pertinent costs or benefits. HECO shall also file an annual report detailing O&M costs associated with the SGS Project. The report should detail actual monthly Project O&M costs, as well as any avoided system-wide O&M costs resulting from the use of the SGS Project.	Anuually by March 31
2017-0213	For Approval to Recover Costs for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism.	Monthly Report of Hourly commitment and Dispatch Data	**Reporting Requirements (page 63)** (A) Monthly reporting. Beginning with the first full calendar month following the in-service date of the SGS Project, HECO shall file hourly commitment and dispatch data for the SGS units and all other HECO and IPP units on the system.	Monthly
2017-0227 (2020-0178)	Letter Request for Expedited Approval of its Second Amended Restated Revolving Syndicated Credit Facility Agreement	Report on each draw on the Syndicated Credit Facility	For each draw on the syndicated credit facility, report annually information on the date, amount, interest rate, maturity date, and purpose for each draw.	Annually
2017-0248	For Approval of Issuance of Unsecured Obligations and Guarantee.	Report on Private Placement Financing	Report the results of the issuance of the Obligations, including the use of all proceeds, the terms and conditions of the financing, and a statement of actual expenses incurred, and provide a copy of the final financing documents (on or before 12/31/2021).	As soon as practicable following the conclusion of each transaction
2018-0053	In the Matter of the Application of MAUI ELECTRIC COMPANY, LIMITED DOCKET NO. 2018-0053 For Approval of Power Purchase Agreement for Renewable As-Available Energy and Electric Services with Moloka'i New Energy Partners, LLC.	Annual Report	C. The PPA shall be modified to require that MNEP shall file with the commission and Consumer Advocate copies of its annual income statements or annual results of operations related to the Facility that will allow the Commission and Consumer Advocate to evaluate the comparability of the project's actual results to MECO's analysis, no later than March 31 of each year, for the previous calendar year.	March 31 of each year
2018-0053	In the Matter of the Application of MAUI ELECTRIC COMPANY, LIMITED DOCKET NO. 2018-0053 For Approval of Power Purchase Agreement for Renewable As-Available Energy and Electric Services with Moloka'i New Energy Partners, LLC.	Quarterly Reports	D. MECO shall: (2) File with the commission and Consumer Advocate quarterly reports that support the finding that MECO is taking reasonable efforts to take advantage of the Post Initia Energy Rate in order to reduce the overall cost of energy to customers. Project not in service yet	Quarterly

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2018-0075	For Approval of the Transfer of Equity Ownership Interest in Certain Joint Poles, to Commit Funds in Excess of $2,500,000, Accounting and Ratemaking Treatment, Amendments to Joint Pole Agreements Between the Applicants, Asset Transfer Agreement, and Pole Licensing Agreement	Annual Report	5. The approvals in Ordering Paragraphs 1 to 4 above are subject to the condition that the HECO Companies shall provide to the commission with copy to the Consumer Advocate an annual report that provides total attachment and ancillary revenues, total incremental O&M costs, depreciation costs, and the authorized return to the HECO Companies shareholders. This annual report shall be due by March 31 of each year for the preceding year, for a ten-year period of time.	March 31 of each year
2018-0089	For Approval of the Issuance and Purchase of Common Stock.	Report on the Sale of Common Stock	Price paid per share, the number of shares issued, and the itemized expenses incurred for the stock sale, the allocation of expenses to each Company, and the basis for the allocation (thru 2022)	Other - Within 60 days of sale
2018-0141	For Approval to Commit Funds in Excess of $2,500,000 for the Phase 1 Grid Modernization Project, to Defer Certain Computer Software Development Costs, to Recover the Capital and Deferred Costs through the Major Project Interim Recovery, and Related Requests	Semi-Annual Progress Report	4. Starting on June 30, 2019, the Companies shall file in this docket, semi-annual progress reports that contain: (1) plans and scope for implementation in up-coming months for each of the Companies' service territories; (2) status regarding the number of meters that the Companies have installed and placed in service, including the network used for the meters, and a direct comparison to the Companies' plan and scope of implementation for each service territory; (3) status of the installation of the MDMS in comparison to the Companies' plans and scope; (4) status of implementation of metering and network communications headend systems in comparison to Companies' plans and scope; and (5) capital and deferred costs incurred by the Companies for each service territory.	Every 6 Months
2018-0168 (2020-0109)	For Approval of Issuance of Unsecured Obligations and Guarantee.	Report on Private Placement Financing	Report the results of the issuance of the Obligations, including the use of all proceeds, the terms and conditions of the financing, and a statement of actual expenses incurred, and provide a copy of the final financing documents (thru 2022).	As soon as practicable following the conclusion of each transaction
2018-0185	for Approval to Commit Funds in Excess of $2,500,000, Excluding Customer Contributions, For Project Item Y00291, Auiki Substation, and Related Approvals.	Quarterly Reports	2. HECO shall provide the Commission and the Consumer Advocate with quarterly status reports of the Project that include the reasons for any delays, and their impact, if any, on the projected revenues, estimated costs, and projected completion date of the Project	Quarterly
2018-0195	For Approval of Cost Recovery Requests for the Community Based Renewable Energy Program.	Annual Report	The Companies shall report annually, in Docket No. 2015-0389: (1) the total amount of unsubscribed energy associated with each CBRE project and the total costs that were included in each Company's respective ECRC; (2) the total amount of compensable curtailment associated with each CBRE project and the total costs that were included in each Company's respective PPAC; and (3) for each curtailment event, the curtailing Company will specifically identify the reason that the curtailment occurred and explain why the costs of such curtailment were not a result of bad faith, waste, an abuse of discretion, or in violation of the law, pursuant to HRS § 269-16.22. Project not in service	Annual

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2018-0422	For Approval to Establish EV-MAUI Electric Vehicle Fast Charging Service and Related Accounting Treatment.	Annual Report	Transmittal No. 13-07-Schedule EV-F and EV-U Electric Vehicle Charging Services Pilots: Hawaiian Electric Companies' Annual Report filed no later than March 31 every year. The four sites selected to be part of the EV MAUI tariff will also comply with the same reporting requirements. Transmittal No. 13-07 reporting requirements: Ordering Paragraph 1.c. and d. By March 31st in each of the following year when the pilot program is in effect, the HECO Companies shall file an annual report that is consistent in principle with the scope and parameters agreed-upon by the Companies and other stakeholders, as reflected in Section x, Reporting, pages 20-21, of Transmittal No. 13-07. Unless ordered otherwise by the commission, the first annual report shall be due by March 31, 2014 , and the final annual report shall be due by March 31, 2019. The annual report shall, at a minimum: i. (1) describe and review the adoption and status of Schedules EV-F and EV-U ii. (2) summarize "the costs, capital and expense, as well as revenues, by Schedule EV F and EV-U tariff and by Company, that have been collected for that reporting year[;]" iii. (3) identity and describe the level and extent of subsidization by non-participating ratepayers, and iv. (4) determine and recommend any revisions to the applicable rate structures that are necessary to: 1. (A) meet the objectives of sufficiently addressing "range anxiety" among EV end-users and conducting the Companies' research, development, and demonstration activities related to EV charging technologies and load control; and 2. (B) minimize the level or non-participating ratepayers.	Annual
			(con't) Modified by D&O 34592, 6/2/2017 A. Unless ordered otherwise by the commission, Schedules EV-F and EV-U shall be in effect until June 30, 2023. D. In addition to the requirements in Decision and Order No. 31338, the annual reports shall include: (1) a description of the analysis that the Companies are undertaking to assess expected utilization for DCFC facilities expected to be deployed during the extension period, including the impacts of geographical location, existing charging infrastructure, population density, and other demographic factors and system needs; and (2) a discussion of how and to what extent the costs for each DCFC facility have been and/or are proposed to be recovered from ratepayers.	
2018-0430	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with AES Waikoloa Solar, LLC	Monthly Reporting	(a) Monthly reporting. Beginning with the first full calendar month following the in-service date of the Project, HELCO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HELCO and IPP units on the system. Projects not in service	Beginning 1st calendar month following in-service date

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2018-0431	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Ho'ohana Solar 1, LLC	Monthly Reporting	3.Monthly Reporting: Beginning the first full calendar month following the in-service date of the Facility, HECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HECO and IPP units on the system. Projects not in service	Beginning 1st calendar month following in-service date
2018-0432	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Hale Kuawehi Solar, LLC	Monthly Reporting	1. Monthly reporting – Beginning with the first full calendar month following the in-service date of the Project, HELCO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HELCO and IPP units on the system Projects not in service	Beginning 1st calendar month following in-service date
2018-0433	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Paeahu Solar LLC.	Monthly Reports	Monthly reporting. Beginning with the first full calendar month following the in-service date of the Project, MECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other MECO and IPP units on the system. The monthly report described above shall be filed in Docket No. 2011-0206 and may be consolidated with other curtailment reports therein. Projects not in service	Monthly
2018-0434	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Mililani I Solar, LLC	Monthly Reporting	3.Monthly Reporting: Beginning the first full calendar month following the in-service date of the Facility, HECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HECO and IPP units on the system. Projects not in service	Beginning 1st calendar month following in-service date
2018-0435	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Waiawa Solar Power, LLC	Monthly Reporting	3.Monthly Reporting: Beginning the first full calendar month following the in-service date of the Facility, HECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other HECO and IPP units on the system. Projects not in service	Beginning 1st calendar month following in-service date
2018-0436	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with AES Kuihelani Solar, LLC	Monthly Reporting	A. Monthly reporting. Beginning with the first full calendar month following the in-service date of the Facility, MECO shall file hourly commitment, dispatch, and curtailment data for the Project and all other MECO and IPP units on the system. Projects not in service	Beginning 1st calendar month following in-service date
2019-0032	For Approval of a Template Master License Agreement for Pole Attachments.	Annual Report	A. The Companies shall file an annual report which, at a minimum, details all attachment and ancillary revenues received from attachers, i.e., "other operating revenues." B. Said annual report shall be due by March 31st each year and cover the preceding calendar year period, with the first report due by March 31, 2020.	March 31, Annually

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2019-0032	For Approval of a Template Master License Agreement for Pole Attachments.	Quarterly Report	C. The Companies shall file quarterly status reports which, at a minimum, include the following information: (I) The current status of the Companies' negotiations with Charter and CenturyLink. (II) The estimated timeframes for the filing of licensing agreements executed between the Companies and Charter and CenturyLink, respectively. (III) To the extent applicable: (a) the current status of the Companies' negotiations with the four other entities that had licensing agreements with Hawaiian Telcom, but do not have attachments on the communication space of the poles that have been transferred to the Companies; and (b) the estimated timeframes for the filing of licensing agreements between the Companies and each four entities, respectively. (IV) Potential liability issues for the Companies associated with existing attachments, including attachers with a commission-approved executed licensing agreement and entities that have yet to execute a licensing agreement. (V) The current estimated and/or actual payments received from existing attachers, as compared to the total ownership cost of the poles, including investment, return, and O&M expenses incurred. Said information shall be reflected on: (a) a company-by-company basis; and (b) a consolidated basis. Said payments include, to the extent applicable, the Attachment Fees, Engineering Design Charge, Make-Ready Charge, and Administrative Charge.	Quarterly
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Schedule TOU-RI Tariff Sheets	Re-establish time-of-use charges (i.e., TOU-RI tariffs) based on updated estimates of marginal costs for the next calendar year	Annually
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Demand Response Adjustment Clause ("DRAC") (HECO)	Quarterly reconciliation of variable DR program costs, for DR programs approved in a general rate case, with actual costs incurred	Quarterly
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	Demand Response Adjustment Clause ("DRAC") (MECO)	Quarterly reconciliation of variable DR program costs, for DR programs approved in a general rate case, with actual costs incurred	Quarterly
2019-0323	Instituting a Proceeding to Investigate Distributed Energy Resource Policies Pertaining To The Hawaiian Electric Companies.	CGS+ and Smart Export Capacity Notification	In Ordering Paragraph No. 37 of Decision and Order No. 34294, the Commission directed the Company to "publicly announce and notify the commission and Parties when 50%, 75%, and 90% of their respective interim Smart Export caps have been reached." The Commission required the same announcement and notification procedure with respect to the CGS+ program administration in Ordering Paragraph No. 49.	Other - Based on notification threshold

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2020-0072	For Approval of Projects Proposed to be Financed Through the Sale of Special Purpose Revenue Bonds, Certification that the Projects Are for the Local Furnishing of Electric Energy, Approval of Issuance of Special Purpose Revenue Bonds and Related Notes and Guarantees, and Approval to Enter into Related Agreements and to Use Expedited Approval Procedure.	Report on Special Purpose Revenue Bond Financing	Report the results of each Act 41 SPRB financing, including information on all actual expenses incurred in the financings and provide a copy of the final principal Financing Documents (2021-2024)	Other - As soon as practicable following the conclusion of each transaction
2020-0137	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Waiawa Phase 2 Solar, LLC.	Monthly Report	Hawaiian Electric shall file hourly commitment, dispatch, and curtailment data for the Project and all other Hawaiian Electric and IPP units on the system. Projects not in service	Monthly
2020-0138	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Kupehau Solar, LLC.	Monthly Report	Hawaiian Electric shall file hourly commitment, dispatch, and curtailment data for the Project and all other Hawaiian Electric and IPP units on the system. Projects not in service	Monthly
2020-0140	For Approval of Power Purchase Agreement for Renewable Dispatchable Generation with Mahi Solar, LLC.	Monthly Report	Hawaiian Electric shall file hourly commitment, dispatch, and curtailment data for the Project and all other Hawaiian Electric and IPP units on the system. Projects not in service	Monthly
2020-0209	Proceeding to Gather Data to Inform Commission Decision-Making Regarding Suspension of Utility Disconnections and Related Issues As a Result of the COVID-19 Pandemic.	COVID-19 Quarterly Report	• Details regarding the length of its suspension of disconnections and other information • Detailing the amounts of the costs incurred and any savings realized, which have been booked to the regulatory assets • Updated information regarding the Utility's financial condition. • A list of the measures the Utility has in place to assist its customers during the COVID-19 emergency situation • Identifying each of the planned deferred costs, containing the details of what will be maintained for each of the deferred costs identified. • Identifying the calculation methodology to be utilized. • Including examples of each of the deferred costs that the Utility is seeking to book as regulatory assets. • Including any changes to tracking the incremental financing cost for the revolving credit facility or calculation of bad debt provisions, or any other change to calculation methodology used. • Identifying any other COVID-19-related costs that are being incurred that were not specifically identified in the initial Application. • Identifying any funds received from loans, grants, assistance or benefits received in connection with COVID- 19. • Identifying the records and metrics used to measure and track any cost savings that have resulted from the COVID-19 emergency period. • Including a percentage depiction of COVID-related costs, in relation to overall costs.	Quarterly

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
2020-0209	Proceeding to Gather Data to Inform Commission Decision-Making Regarding Suspension of Utility Disconnections and Related Issues As a Result of the COVID-19 Pandemic.	COVID-19 Monthly Report	1. Total Number of Utility Customers, by applicable customer classes; 2. Total dollar value of all customer late fees that have been waived pursuant to this Order since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report); 3. Total dollar value of all customer interest charges that have been waived pursuant to Order No. 37506 since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report); 4. Tariff provision that governs Utility threshold for customer disconnections (required for Utility's initial report filing only); 5. Total number of customers that became eligible for disconnection due to nonpayment of bills, but were not disconnected because of the disconnection suspension, since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report); 6. Total number of customers re-connected due to the suspension of any and all rules and provisions that prevent or condition re-connection of disconnected customers since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report); 7. Number of customers in arrears by vintage (30/60/90 days, etc.), by applicable customer classes; 8. Total dollar value of unpaid balances by vintage, by applicable customer classes; 9. Number of payment plan agreements Utility entered into with its customers 10. Number of customers engaged by the Utility with information about potential payment plans and other assistance since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report);	Monthly
			(con't) 11. Amount of CARES Act funding (or other COVID-relief funds) that have been used to assist customers with bill payments since March 5, 2020 (or, after the Utility's initial report filing, since the Utility's last report); and 12. A description and utilization statistics related to the Utility's customer assistance programs (other than information that is already captured by the data points above)	
n/a	n/a	Hawaiian Electric Avoided Energy Cost Data	On-peak and off-peak avoided energy cost rates	Monthly
n/a	n/a	Hawai‘i Electric Light Avoided Energy Cost Data	On-peak and off-peak avoided energy cost rates	Monthly
n/a	n/a	Maui Electric Avoided Energy Cost Data	On-peak and off-peak avoided energy cost rates	Monthly
n/a	n/a	Hawaiian Electric Energy Cost Recovery Factor	Energy Cost Recovery Factor	Monthly
n/a	n/a	Hawai‘i Electric Light Energy Cost Recovery Factor	Energy Cost Recovery Factor	Monthly
n/a	n/a	Maui Electric Energy Cost Recovery Factor	Energy Cost Recovery Factor	Monthly
n/a	n/a	Hawaiian Electric Schedule “Q” Rate	Schedule “Q” Energy Payment Rate	Monthly

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
n/a	n/a	Hawai'i Electric Light Schedule "Q" Rate	Schedule "Q" Energy Payment Rate	Monthly
n/a	n/a	Maui Electric Schedule "Q" Rate	Schedule "Q" Energy Payment Rate	Monthly
n/a	n/a	Hawaiian Electric Revised Target Sales Heat Rates	Revised ECRC tariff sheets and calculation of the applicable target sales heat rate for LSFO and other company generation sources in the Major Energy Component	Annually
n/a	n/a	Hawai'i Electric Light Revised Target Sales Heat Rates	Revised ECRC tariff sheets and calculation of the revised target sales heat rates for industrial fuel and diesel fuel	Annually
n/a	n/a	Maui Electric Revised Target Sales Heat Rates	Revised ECRC tariff sheets and calculation of the calculation of the applicable target sales heat rates for 2020 for industrial fuel, diesel fuel, and other company generation sources for each division	Annually
n/a	n/a	Capital Project Status Report	Capital project status reports for the Hawaiian Electric Companies, estimated filing schedule for the Hawaiian Electric Companies' capital project applications for the next 12 months, lists of major reliability projects in progress for the Hawaiian Electric Companies, listings of completed projects pending final cost reports and completed projects for which the Companies have filed final cost reports in the reporting period	Quarterly
n/a	n/a	Capital Expenditures Budget Report	Hawaiian Electric Companies' capital expenditure project and program forecast, including (1) summary tables of the Companies' estimated net capital expenditures (i.e., net of customer contributions) by strategic transformation plan category, (2) a list of the projects and programs with net capital expenditures in the upcoming year, including the estimated start and completion dates for each project, (3) a brief description, the primary reasons and net capital expenditure projections for projects with estimated costs of $1 million or more in the upcoming year.	Annually
n/a	n/a	Employer's Report of Industrial Injury (Form WC-1)	Employer's Report of Industrial Injury (Form WC-1)	Other - After Each Incident
n/a	n/a	Status of Compliance with Conditions of Merger	Status of compliance with Conditions of Merger, Listing of HEI's subsidiaries, and whether HECO's relationship with HEI has in any way affected its ability to executive its public service responsibilities	Annually
n/a	n/a	Hawaiian Electric Monthly Report	Monthly report includes: 1 Monthly financial report 2 Electric utility department operating expense 3 Summary of electric energy sold 4 Monthly unbilled kWh and revenue	Monthly
n/a	n/a	Hawai'i Electric Light Monthly Report	Monthly report includes: 1 Monthly financial report 2 Electric utility department operating expense 3 Summary of electric energy sold 4 Monthly unbilled kWh and revenue	Monthly
n/a	n/a	Maui Electric Monthly Report	Monthly report includes: 1 Monthly financial report 2 Electric utility department operating expense 3 Summary of electric energy sold 4 Monthly unbilled kWh and revenue	Monthly

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
n/a	n/a	Hawaiian Electric Monthly Rate of Return Report	Monthly report consisting of monthly rate of return on rate base and on Common Stock (book method). On a quarterly basis, the Company also provides rate of return on rate base and on Common Stock (ratemaking).	Monthly (book method) Quarterly (ratemaking)
n/a	n/a	Hawai'i Electric Light Monthly Rate of Return Report	Monthly report consisting of monthly rate of return on rate base and on Common Stock (book method). On a quarterly basis, the Company also provides rate of return on rate base and on Common Stock (ratemaking).	Monthly (book method) Quarterly (ratemaking)
n/a	n/a	Maui Electric Monthly Rate of Return Report	Monthly report consisting of monthly rate of return on rate base and on Common Stock (book method). On a quarterly basis, the Company also provides rate of return on rate base and on Common Stock (ratemaking).	Monthly (book method) Quarterly (ratemaking)
n/a	n/a	PUC Annual Utility Report	Annual report utilizing the FERC Form No. 1 format, providing statistical financial and operational information in a format readily comparable to other utilities.	Annually
n/a	n/a	Form 8-K	A copy of Form 8-K current report to the SEC filed by HEI and Hawaiian Electric (reporting of specified events that may be important to shareholders and the SEC).	Other - filed as needed to disclose significant events
n/a	n/a	Form 10-Q	A copy of Form 10-Q report to the SEC filed by HEI and Hawaiian Electric (quarterly financial report)	Quarterly
n/a	n/a	Form 10-K	A copy of Form 10-K report to the SEC filed by HEI and Hawaiian Electric (an annual comprehensive summary of Companies' financial performance)	Annually
n/a	n/a	Annual Report to Shareholders	A copy of HEI's annual report to shareholders	Annually
n/a	n/a	Effective Rate Summaries	Effective rates for the rate scheules for all counties on a monthly basis.	Monthly
n/a	n/a	HECO Adequacy of Supply	The generation capacity of the utility's plant, supplemented by electric power regularly available from other sources, must be sufficiently large to meet all reasonably expectable demands for service and provide a reasonable reserve for emergencies. A Statement shall be filed annually with the Commission within 30 days after the close of the year indicating the adequacy of such capacity and the method used to determine the required reserve capacity which forms the basis for future requirements in generation, transmission, and distribution plant expansion programs required under Rule 2.3h.1.	Annually Jan 30
n/a	n/a	MECO Adequacy of Supply	The generation capacity of the utility's plant, supplemented by electric power regularly available from other sources, must be sufficiently large to meet all reasonably expectable demands for service and provide a reasonable reserve for emergencies. A Statement shall be filed annually with the Commission within 30 days after the close of the year indicating the adequacy of such capacity and the method used to determine the required reserve capacity which forms the basis for future requirements in generation, transmission, and distribution plant expansion programs required under Rule 2.3h.1.	Annually Jan 30
n/a	n/a	HELCO Adequacy of Supply	The generation capacity of the utility's plant, supplemented by electric power regularly available from other sources, must be sufficiently large to meet all reasonably expectable demands for service and provide a reasonable reserve for emergencies. A Statement shall be filed annually with the Commission within 30 days after the close of the year indicating the adequacy of such capacity and the method used to determine the required reserve capacity which forms the basis for future requirements in generation, transmission, and distribution plant expansion programs required under Rule 2.3h.1.	Annually Jan 30

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
n/a	n/a	HECO System Cost Data (PURPA) filing	a) To make available data from which avoided costs may be derived, not later than June 30, 1982 and not less often than every two years thereafter, each regulated electric utility described in §6-74-16 shall provide to the Commission, and shall maintain for public inspection at its administrative office the following data: (1) The estimated avoided cost of the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. Such levels of purchases shall be stated in blocks of not more than one hundred megawatts, for systems with peak demand of one thousand megawatts or more, and in blocks, equivalent to not more than ten percent of the system peak demand, for systems with peak demand of less than one thousand megawatts. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily peak and offpeak periods, by year, for the current calendar year and each of the next five years. The utility shall specify whether the costs are current costs or projected costs; (2) The electric utility's plan for the addition of capacity or load management facilities or both by amount and type, for purchases of firm, and for capacity retirements for each year during the succeeding ten years; and (3) The estimated capacity or load management facilities or both costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit operating at its most efficient point, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases. The utility shall specify whether costs are current costs or projected costs.	Biennial June 30 even years

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
n/a	n/a	HELCO System Cost Data (PURPA) filing	a) To make available data from which avoided costs may be derived, not later than June 30, 1982 and not less often than every two years thereafter, each regulated electric utility described in §6-74-16 shall provide to the Commission, and shall maintain for public inspection at its administrative office the following data: (1) The estimated avoided cost of the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. Such levels of purchases shall be stated in blocks of not more than one hundred megawatts, for systems with peak demand of one thousand megawatts or more, and in blocks, equivalent to not more than ten percent of the system peak demand, for systems with peak demand of less than one thousand megawatts. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily peak and offpeak periods, by year, for the current calendar year and each of the next five years. The utility shall specify whether the costs are current costs or projected costs; (2) The electric utility's plan for the addition of capacity or load management facilities or both by amount and type, for purchases of firm, and for capacity retirements for each year during the succeeding ten years; and (3) The estimated capacity or load management facilities or both costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit operating at its most efficient point, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases. The utility shall specify whether costs are current costs or projected costs.	Biennial June 30 even years

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
n/a	n/a	MECO System Cost Data (PURPA) filing	a) To make available data from which avoided costs may be derived, not later than June 30, 1982 and not less often than every two years thereafter, each regulated electric utility described in §6-74-16 shall provide to the Commission, and shall maintain for public inspection at its administrative office the following data: (1) The estimated avoided cost of the electric utility's system, solely with respect to the energy component, for various levels of purchases from qualifying facilities. Such levels of purchases shall be stated in blocks of not more than one hundred megawatts, for systems with peak demand of one thousand megawatts or more, and in blocks, equivalent to not more than ten percent of the system peak demand, for systems with peak demand of less than one thousand megawatts. The avoided costs shall be stated on a cents per kilowatt-hour basis, during daily peak and offpeak periods, by year, for the current calendar year and each of the next five years. The utility shall specify whether the costs are current costs or projected costs; (2) The electric utility's plan for the addition of capacity or load management facilities or both by amount and type, for purchases of firm, and for capacity retirements for each year during the succeeding ten years; and (3) The estimated capacity or load management facilities or both costs at completion of the planned capacity additions and planned capacity firm purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit operating at its most efficient point, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases. The utility shall specify whether costs are current costs or projected costs.	Biennial June 30 even years
n/a	n/a	Standards for Electric Service Reports	1. the number of master meters installed, 2. a comparison of the revenues collected from the automatic fuel adjustment clause and the additional costs of energy above the base energy cost incurred by the utility during the year based on the same period the cost was incurred and the energy consumed by the customers, 3. the number of terminations of service, and 4. advertising expense.	Annually Mar 15
n/a	Accident Reporting Process	Accident Reports, Monthly	The Companies will follow up with a final monthly compilation report for non-fatal, reportable incidents, lagged 30-days after the end of the month in which they occurred (e.g., December incidents would be reported by the end of January).	Monthly
n/a Tariff Transmittal	For Approval to Modify the RBA Rate Adjustment in its Revenue Balancing Account Provision Tariff and approval Of the Measured Performance and Calculation of the PIM Financial Incentives and Performance Incentive Adjustment.	HECO Companies' Annual Decoupling Filing	Transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period.	Annually

Hawaiian Electric Companies
List of Reports Recommended to Be Continued

Docket No.	Proceeding Name	Filing Name	Reporting Requirement	Frequency
Trans. No. 17-01	For Approval to Establish a Special Medical Needs Provision in Schedule R – Residential Service, On a Pilot Basis.	SMNPP Quarterly reports	C. The Companies shall file quarterly status reports which include the following information: i. Identifying by each island: (1) the total number of applications; (2) the total number of enrolled pilot program customers with a summary of the type of customer by criteria enrolled in the program; (3) the total number of customers who dis-enroll from the program; and (4) the total number of customers who also participate in the Companies' Low-Income Home Energy Assistance Program. ii. Identifying all pilot program administrative costs and indicating: (1) whether such costs are initial or on-going; and (2) whether said administrative costs could have been lower if, instead of 500 kWh, an existing kWh tier was used.	Quarterly
Transmittal No. 15-06	Transmittal No. 15-06	Sun Power for Schools Status Report	Transmittal No. 15-06, D&O No. 32945 dated 6/30/2015: Order paragraph 3. The Companies shall continue to file their status reports on their Green Pricing Program. As recommended by the Consumer Advocate and agreed to by the Companies, the next status report shall include: • A. discussion of specific outreach conducted by the Companies to ensure that actual and potential participants are aware of the transition from the existing Sun Power for Schools Program to the Smart Power for Schools Project; • B. A discussion of the support HECO plans to provide to assist the DOE in updating or expanding the Smart Power for Schools Project curriculum; and • C. A description of any plans to implement specific "Smart Power" technologies and strategies, including a discussion of the type(s) of system(s) considered and the associated costs, benefits, and bill savings. NOTE: Effective Jan. 01, 2015, now known as "Smart Power For Schools" Note: Changed to Annual filing see Transmittal 15-06, D&0 32945 dated 6/30/15 Note: CA's SOP dated 6/6/2015 agreed to Companies' proposal to file annual report.	Annual

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing document, together with this Certificate of Service, were duly served on the following parties and participants, by having said copies delivered by electronic service, by hand delivery, and/or by mailing a copy by United States mail, postage prepaid, as set forth below:

Party	Electronic Service	Hand Delivery	U.S Mail
Division of Consumer Advocacy Department of Commerce and Consumer Affairs 335 Merchant Street, Room 326 Honolulu, Hawai'i 96813 dnishina@dcca.hawaii.gov consumeradvocate@dcca.hawaii.gov	1		
Henry Curtis Life of the Land Vice President for Consumer Issues P.O. Box 37158 Honolulu, Hawai'i 96837-0158 henry.lifeoftheland@gmail.com	1		
Chris DeBone Distributed Energy Resources Council of Hawaii President Hawaii Energy Connection 99-1350 Koaha Pl. Aiea, HI 96701 chris@hawaiienergyconnection.com	1		
Beren Argetsinger Tim Lindl Keyes & Fox LLP 580 California Street, 12th Floor San Francisco, CA 94104 Attorneys for HAWAII PV COALITION bargetsinger@keyesfox.com tlindl@keyesfox.com	1		

Party	Electronic Service	Hand Delivery	U.S Mail
Hannah Polikov Coley Girouard Advanced Energy Economy 1000 Vermont Ave., Third Floor Washington DC, 20005 hpolikov@aee.net cgirouard@aee.net	1		
Melissa Miyashiro, Chief of Staff Blue Planet Foundation 55 Merchant Street, 17th Floor Honolulu, Hawai‘i 96813 melissa@blueplanetfoundation.org Isaac H. Moriwake Kylie W. Wager Cruz Earthjustice 850 Richards Street, Suite 400 Honolulu, Hawai‘i 96813 imoriwake@earthjustice.org kwager@earthjustice.org Attorneys for BLUE PLANET FOUNDATION	1		
Duane W.H. Pang 530 South King Street, Room 110 Honolulu, Hawai‘i 96813 Attorneys for CITY AND COUNTY OF HONOLULU eyarbrough@honolulu.gov mele.coleman@honolulu.gov dpang1@honolulu.gov	1		
Joseph K. Kamelamela Angelic M.H. Hall County of Hawai‘i 101 Aupuni Street, Suite 325 Hilo, Hawai‘i 96720 Attorneys for COUNTY OF HAWAI‘I Angelic.hall@hawaiicounty.gov Kris.mayes@asu.edu	1		

Party	Electronic Service	Hand Delivery	U.S Mail
Rocky Mould Hawai'i Solar Energy Association Executive Director P.O. Box 37070 Honolulu, Hawai'i 96817 rmould@hsea.org	1		
Douglas A. Codiga Mark F. Ito Topa Financial Center 745 Fort Street, Suite 1500 Honolulu Hawai'i 96813 Attorneys for ULUPONO INITIATIVE LLC dcodiga@schlackito.com mito@schlackito.com	1		

DATED: Honolulu, Hawai'i, April 9, 2021.

/s/ Andrew Nojiri
Andrew Nojiri
HAWAIIAN ELECTRIC COMPANY, INC.
Regulatory Affairs

The foregoing document was electronically filed with the State of Hawaii Public Utilities Commission's Document Management System (DMS).